XR-C440/C450

SERVICE MANUAL

US Model
Canadian Model
XR-C450
E Model
XR-C440/C450

Ver 1.1 2001.08

Photo: XR-C450

Refer to RM-X2S/X3S SERVICE MANUAL (9-960-039-□□) issued previously for information of remote commander (RM-X2S) supplied with XR-C440.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
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Model Name Using Similar Mechanism	NEW
Tape Transport Mechanism Type	MG-25C-136

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

12 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08% (WRMS)
Frequency response	30 – 18,000 Hz (C440/C450: US, Canadian) 30 – 20,000 Hz (C450: E, Saudi Arabia)
Signal-to-noise ratio	

Cassette type	Dolby B NR	Dolby NR off
TYPE II, IV	67 dB	61 dB
TYPE I	64 dB	58 dB

Tuner section

FM

Tuning range	US, Canadian model: 87.5 – 107.9 MHz E, Saudi Arabia model: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB (C450: E, Saudi Arabia) 4 dB (C440/C450: US, Canadian)

— Continued on next page —

XR-C440/C450: US, Canadian Model
FM/AM CASSETTE CAR STEREO

XR-C450: E Model
FM/MW/SW CASSETTE CAR STEREO

9-925-536-12
2001H0500-1
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Sony Corporation
e Vehicle Company
Shinagawa Tec Service Manual Production Group

SONY

AM (MW)

Tuning range	US, Canadian model: 530 – 1,710 MHz E, Saudi Arabia model: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)

SW (C450: E, Saudi Arabia)

Tuning range	SW tuning interval: SW1: 2,940 – 7,735 kHz SW2: 9,500 – 18,135 kHz (except for 10,140 – 11,575 kHz)
Antenna terminal	External antenna connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	30 µV (C440/C450: US, Canadian) 40 µV (C450: E, Saudi Arabia)

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W × 4 (at 4 ohms)

General

Outputs	Power antenna control lead Line out Rear (1) Front (1) (C450)
Tone controls	Bass ±8 dB at 100 Hz Treble ±8 dB at 100 Hz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 × 58 × 181 mmm (7 1/2 × 2 3/8 × 7 1/4 in.) (w / h / d)
Mounting dimensions	Approx. 182 × 53 × 164 mmm (7 1/4 × 2 1/8 × 6 1/2 in.) (w / h / d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary remote RM-X2S (C440) Wireless Remote Commander RM-X40 (C450: E, Saudi Arabia)

Design and specifications are subject to change without notice.

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Flexible Circuit Board Repairing

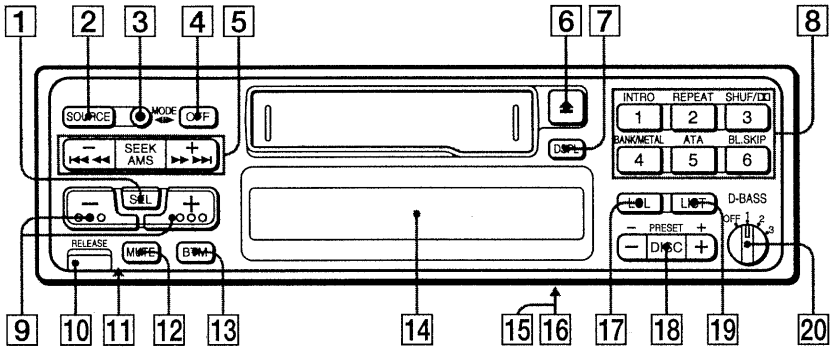
- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering .

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

This section is extracted from instruction manual.

Location of controls (XR-C440)



Refer to the pages for further details.

1 **SEL (control mode select) button 5, 8, 9, 10, 11, 13, 14**

2 **SOURCE button (TAPE/TUNER/CD/MD) 5, 7, 11, 13**

3 **MODE (◀I▶) button**
During Tuner reception:
BAND select 7

During Tape playback:
Transport direction change 5

During CD/MD playback:
CD/MD Changer select 11

4 **OFF button 4, 5**

5 **SEEK/AMS button 5, 6, 7, 8, 11, 12**

6 **⏏ (eject) button 5**

7 **DSPL (display mode change/time set) button 5, 6, 8, 11, 13, 14**

8 **During radio reception:**
Preset number buttons 7

During tape/CD/MD playback:
① **INTRO button 6, 12**
② **REPEAT button 6, 12**
③ **SHUF/DOLBY (Shuffle/Dolby B NR) button 6, 12**
④ **BANK/METAL button 6, 14**
⑤ **ATA (Automatic Tuner Activation) button 6**
⑥ **BL.SKIP (Blank Skip) button 6**

9 **⊕⊖ (volume/bass/treble/balance/fader control) button 5, 8, 9, 10, 13**

10 **RELEASE (front panel release) button 4, 16**

11 **Reset button (located on the front side of the unit hidden by the front panel)**
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

12 **MUTE button 10**

13 **BTM (Best tuning memory function) button 7**

14 **Display window**

15 **POWER SELECT switch (located on the bottom of the unit)**
See "POWER SELECT Switch" in the Installation/Connections manual.

16 **Frequency Select switch (located on the bottom of the unit)**
See "Frequency Selet switch" in the Installation/Connections manual.

17 **LCL (local seek adjust) button 8**

18 **PRESET/DISC button**

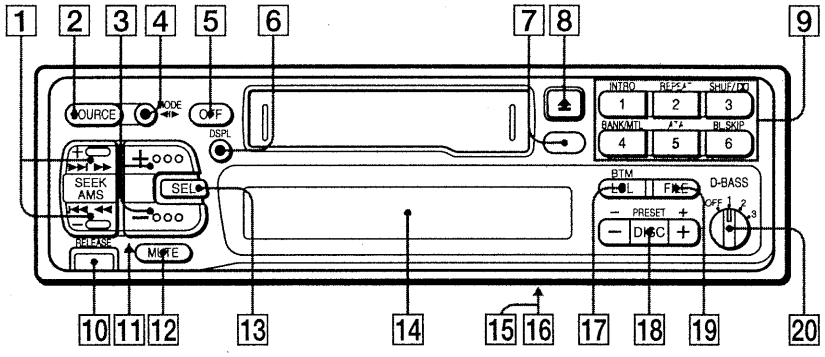
During Tuner reception:
Preset stations select 7, 9

During CD/MD playback:
Disc change 12, 14

19 **LIST (custom file mode select • set) button 8, 9, 13, 14**

20 **D-BASS control 11**

Location of controls (XR-C450)



Refer to the pages for further details.

1 **SEEK/AMS button 6, 7, 8, 11, 13**

2 **SOURCE button (TAPE/TUNER/CD/MD) 6, 7, 8, 11, 13**

3 **⊕⊖ (volume/bass/treble/balance/ fader control) button 5, 9, 10, 12, 13**

4 **MODE (◄I►) button**
During Tuner reception:
BAND select 7, 8

During Tape playback:
Transport direction change 6

During CD/MD playback:
Changer select 11

5 **OFF button 4, 5, 6**

6 **DSPL (display mode change/time set) button 5, 6, 8, 9, 11, 13**

7 **Receptor for wireless remote**

8 **⏏ (eject) button 6**

9 **During radio reception:**
Preset number buttons 8

During tape/CD/MD playback:
① **INTRO button 6, 11**
② **REPEAT button 6, 11, 12**
③ **SHUF/DO (Shuffle/Dolby B NR) button 7, 12**
④ **BANK/MTL button 7, 13**
⑤ **ATA (Automatic Tuner Activation) button 7**
⑥ **BL.SKIP (Blank Skip) button 7**

10 **RELEASE (front panel release) button 4, 15**

11 **Reset button (located on the front side of the unit hidden by the front panel)**
Press this button when you use this unit for the first time, when you have changed the car battery, or when the buttons of this unit do not function properly.

12 **MUTE button 10**

13 **SEL (control mode select) button 5, 9, 10, 12, 13**

14 **Display window**

15 **POWER SELECT switch (located on the bottom of the unit)**
See "POWER SELECT Switch" in the Installation/Connections manual.

16 **Frequency Select switch (E, Saudi Arabia model) (located on the bottom of the unit)**
See "Frequency Selet switch" in the Installation/Connections manual.

17 **LCL/BTM (local seek/Best tuning memory function) button 7, 8**

18 **PRESET/DISC button**
During Tuner reception:
Preset station select 8

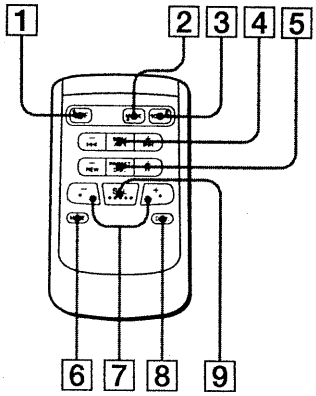
During CD/MD playback:
Disc change 11

19 **FILE (custom file mode select/set) button 8, 9, 12, 13**

20 **D-BASS control 10**

(XR-C450: E, Saudi Arabia)

Wireless Remote Commander (RM-X40)



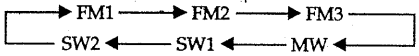
1 **OFF button**

2 **MODE button**

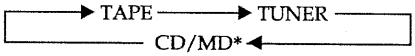
During Tape playback:
Changes the playback side of the cassette.

During CD/MD playback:
Selects CD/MD changers when several CD/MD changers are connected.

During radio reception:
Changes preset groupes within band received.



3 **SOURCE button**
Press to select program sources.
Each time the button is pressed, the program source mode changes as follows:



* *When the CD/MD changer unit is connected.*

4 **SEEK/AMS button**
You cannot do the manual search and manual tuning with the remote commander.

5 **PRESET/DISC button**

6 **MUTE button**

7 ⊕ ⊖ **button**

8 **DSPL button**

9 **SEL button**

The unit cannot be operated with the wireless remote commander unless the SOURCE button on the unit is pressed or a cassette is inserted to activate the unit first.

Installation

Instalación

安裝

(XR-C440/XR-C450: E, Saudi Arabia)

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the mounting location carefully so that the unit does not interfere with normal driving operation.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

Precauciones

- No toque los cuatro orificios de la superficie superior de la unidad. Estos orificios son para ajustes del sintonizador que solamente deberán realizar técnicos de reparación.
- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como a la luz solar directa o al aire calienete de calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, emplee solamente la ferretería de montaje suministrada.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 20°.

使用前須知事項

- 請勿擅自觸動本機頂部的四個小孔。該孔只供專業人員調整調諧機時之用。
- 本機請放在不妨礙司機駕駛之處。
- 避免把本機放在高溫之處，如陽光直接照射、暖氣機前、或灰塵極多、髒亂或易受震動等地方。
- 為了安全起見，安裝時請使用附屬的安裝道具。

安裝角度之調整

請在20度以內調整安裝角度。

How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

To detach

Press the RELEASE button to open up the front panel, then pull it out.

To attach

Align parts Ⓐ and Ⓑ, and push the front panel unit it clicks.

Forma de extraer e instalar el panel frontal

Antes de instalar la unidad, extraiga el panel frontal.

Para extraerlo

Presione la tecla RELEASE para abrir el panel frontal y, a continuación, extráigalo.

Para instalarlo

Alinee las partes Ⓐ y Ⓑ, y presione el panel frontal hasta que chasquee.

前板之裝卸

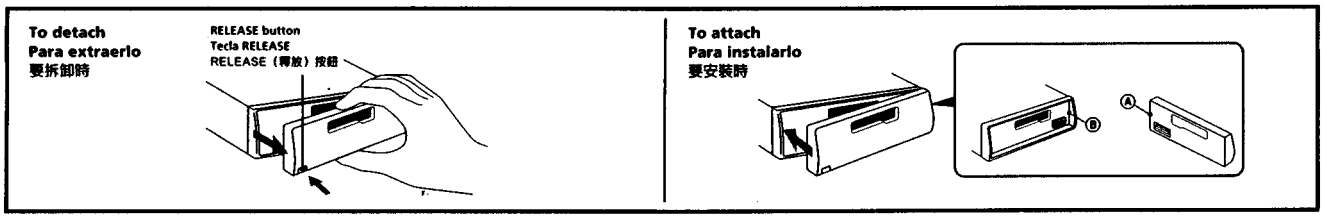
開始安裝以前，請先拆下前板。

要拆卸時

按下RELEASE（釋放）按鈕以掀開前面板，然後把它拉來。

要安裝時

如圖所示，對齊前板的Ⓐ孔及本機的支軸Ⓑ點，然後將左側向內壓入。



Mounting example

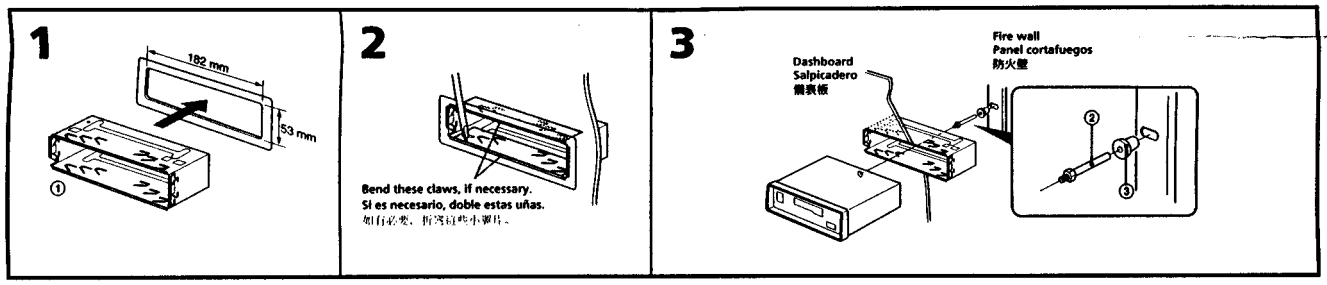
Installation in the dashboard

Ejemplo de montaje

Instalación en el salpicadero

安裝例子

安裝於儀表板上



Mounting the Unit in a Japanese Car

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

Montaje de la unidad en un automóvil japonés

Usted no podrá instalar esta unidad en algunos sutomóviles japoneses. En tal caso, consulte a su proveedor Sony.

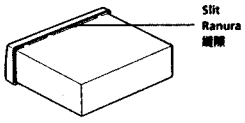
要安裝於日本汽車裡

有的汽車不能安裝本機，此時，請向離貴地最近的 Sony 經銷店查詢。

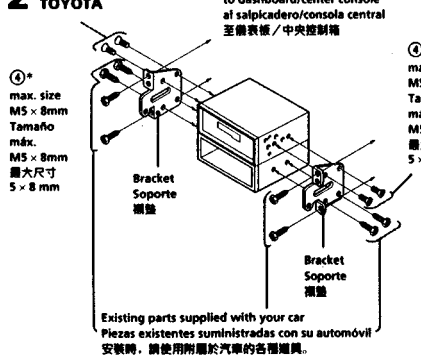
1 **Run a blade along the slits on the back of the front trim and cut it off of the unit.**

Pase una cuchilla a lo largo de las ranuras de la parte posterior del adorno frontal y córtelo.

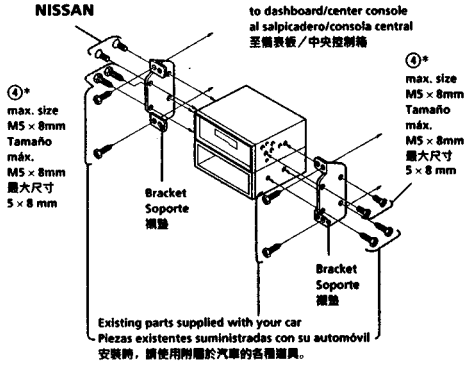
用鋼鋸沿著前整飾部後的縫隙，將它從機器上切下來。



2 **TOYOTA**



NISSAN



* **To the prevent malfunction, install only with the supplied screws ④. Do not use an electric or impact screwdriver.**

* **Para evitar que se produzcan fallos, realice la instalación solamente con los tornillos suministrados ④ y utilice las piezas suministradas con el automóvil.**

* **為防止發生意外事故，安裝時只能使用附屬的螺絲④及汽車所附屬的部件。**

Installation
(XR-C450: US, Canadian)

Precautions

- Do not tamper with the four holes on the upper surface of the unit. They are used for tuner adjustments to be made only by service technicians.
- Choose the installation location carefully so that the unit will not hamper the driver during driving.
- Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.
- Use only the supplied mounting hardware for safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 20°.

How to Detach and Attach the Front Panel

Before installing the unit, detach the front panel.

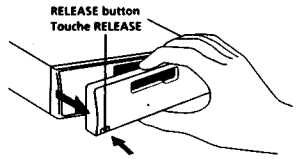
To detach

Press the RELEASE button to open up the front panel, then pull it out.

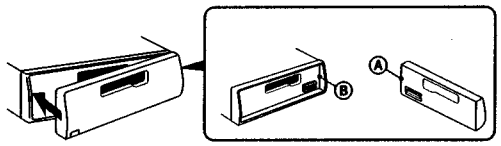
To attach

Align parts Ⓐ and Ⓑ, and push the front panel in until it clicks.

To detach
Retrait

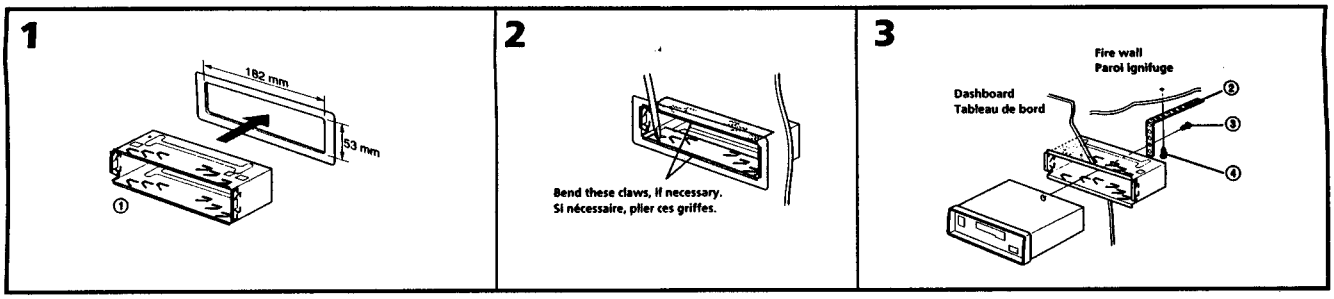


To attach
Pose



Mounting Example

Installation in the dashboard

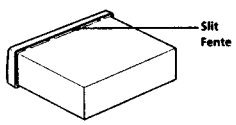


Mounting the Unit in a Japanese Car

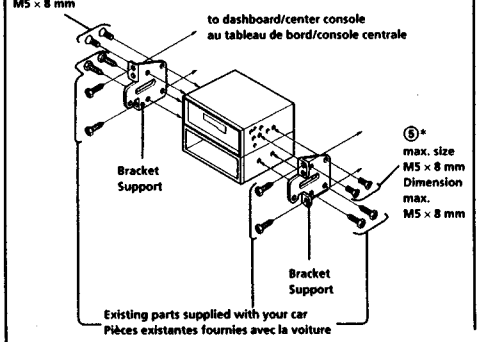
This unit may not be installed in some makes of cars. In this case, consult your nearest Sony dealer.

1 **Run a blade along the slits on the back of the front trim and cut it off of the unit.**

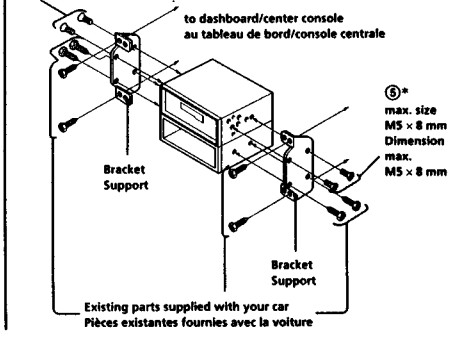
Passer une lame le long des fentes à l'arrière de la bordure et la couper.



2 **TOYOTA**



NISSAN



* **To the prevent malfunction, install only with the supplied screws ⑤. Do not use an electric or impact screwdriver.**

* **Pour éviter tout dysfonctionnement, utilisez uniquement les vis ⑤ pour le montage. N'utilisez pas de tournevis électrique ou à percussion.**

Installation

Précautions

- Ne pas toucher les quatre orifices sur le panneau supérieur de l'appareil. Ils servent aux réglages du tuner qui ne doivent être effectués que par un technicien.
- Choisir soigneusement l'emplacement de l'installation, pour que l'appareil ne gêne pas la conduite.
- Eviter d'installer l'appareil dans un endroit exposé à des températures élevées, comme en plein soleil ou à proximité d'une bouche d'air chaud, ou à de la poussière, de la saleté ou des vibrations violentes.
- Pour garantir un montage sûr, n'utiliser que le matériel fourni.

Réglage de l'angle de montage

Ajuster l'inclinaison à un angle inférieur à 20°.

Retrait et pose du panneau avant

Avant d'installer l'appareil, déposer le panneau avant.

Retrait

Appuyer sur la touche RELEASE pour ouvrir le panneau avant, puis l'enlever.

Pose

Aligner les points Ⓐ et Ⓑ, puis pousser l'appareil jusqu'au déclic.

Exemple de montage

Installation dans le tableau de bord

Installation de l'appareil dans une voiture japonaise

Cet appareil ne peut pas être installé dans certaines voitures. Consultez, dans ce cas, votre concessionnaire Sony.

Installing the rotary remote (XR-C440)

Notes

- *Choose the mounting location carefully so the rotary remote will not interfere with operating the car.*
- *Do not install the rotary remote in a place where it may jeopardize the safety of the (front) passenger in any way.*
- *When installing the rotary remote, be sure not to damage any electrical cables etc. on the other side of the mounting surface.*
- *Avoid installing the rotary remote where it may be subject to high temperatures, such as from direct sunlight or hot air from the heater etc.*

Instalación del mando rotativo

Notas

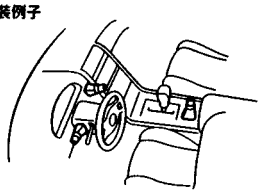
- *Elija cuidadosamente el lugar de montaje de forma que el mando rotativo no dificulte la conducción del coche.*
- *No instale el mando rotativo en un lugar donde pueda poner en peligro la seguridad del pasajero acompañante.*
- *Al instalar el mando rotativo, asegúrese de no dañar los cables de electricidad, etc., del otro lado de la superficie de montaje.*
- *Procure no instalar el mando rotativo en un lugar expuesto a altas temperaturas, como a la luz solar directa o al aire caliente de la calefacción, etc.*

安裝旋轉型遙控器

註

- *旋轉型遙控器請裝在不妨礙汽車駕駛之處。*
- *不可把旋轉型遙控器裝在對乘客有危險的地方。*
- *安裝遙控器時，請注意不要讓螺絲釘損及安裝面反面的電線等。*
- *避免把遙控器安裝在高溫，如直射陽光底下或受暖氣機熱流吹拂的地方。*

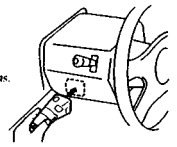
Example of a mounting location
Ejemplo de un lugar de montaje
安裝例子



1 **Choose the exact location for mounting the rotary remote, then clean the mounting surface.**
Dirt and oil impair the adhesive strength of the double-sided adhesive tape.

Una vez elegido el lugar de montaje del mando rotativo, limpie previamente la superficie de montaje.
La suciedad o la grasa dañan la intensidad adhesiva de la cinta adhesiva de dos caras.

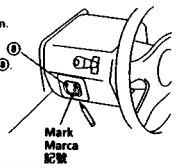
選擇一個適合安裝旋轉型遙控器的地方。
去面附灰或有油污會減低兩面膠帶的黏貼力。



2 **Mark the position for the supplied screws.**
Use the screw holes on the mounting hardware Ⓑ to mark the position.

Marque la posición para los tornillos suministrados.
Para ello, utilice los orificios para tornillos de la ferretería de montaje Ⓑ.

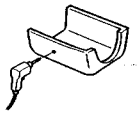
畫 1 個供螺絲釘鑽孔之處
按照安裝直具Ⓑ的螺絲釘孔位置作記號。



3 **Remove the steering wheel column cover, and drill 2 mm diameter holes at the marked position.**

Extraiga la cubierta de la columna de la dirección y haga orificios de 2 mm. de diámetro en el lugar marcado.

取下轉向柱外殼，並在所作記號之處鑽開 2mm 大小的釘孔。

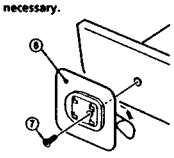


4 **Warm the mounting surface and the double-sided adhesive tape on the mounting hardware Ⓑ to a temperature of 20°C to 30°C, and attach the mounting hardware to the mounting surface applying even pressure. Then screw it down with the supplied screws Ⓖ.**
Attach a piece of heavy duty tape etc. on the other side of the mounting surface to cover the protruding tips of the screws so they will not interfere with any electrical cables etc. inside the steering wheel column.

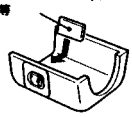
Caliente la superficie de montaje y la cinta adhesiva de doble cara de la ferretería de montaje Ⓑ a una temperatura entre 20°C y 30°C, y ajuste la ferretería de montaje a la superficie de montaje ejerciendo una presión uniforme. A continuación, apriete los tornillos Ⓖ suministrados.
Adhiera un trozo de cinta adhesiva resistente, etc. en el otro lado de la superficie de montaje para cubrir los extremos de los tornillos que sobresalgan, de forma que no interfieran con los cables de electricidad, etc., del interior de la columna de dirección.

把安裝直及安裝道具 Ⓑ的兩面膠帶加熱至 20° 到 30° 程度，然後把安裝道具貼在轉向柱外殼，貼時所施加壓力須均等，以附屬的螺絲釘 Ⓖ 把安裝道具釘緊。
在安裝面的反面之螺絲釘尖端部分，貼張強力膠帶等，以免傷害轉向柱裡面的電線等。

Cut the mounting hardware Ⓑ, if necessary.
Si es necesario, corte la pieza Ⓑ.
必要時，可截切安裝五金 Ⓑ。



Heavy duty tape etc.
Cinta adhesiva resistente, etc.
強力膠帶等



5 **After reinstalling the steering wheel column cover, attach the rotary remote to the mounting hardware by aligning the four holes on the bottom of the rotary remote with the four catches on the mounting hardware and sliding the rotary remote until it locks into place as illustrated.**

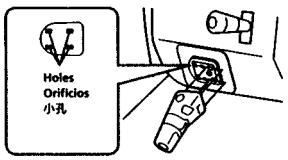
Note
If you are mounting the rotary remote on the steering wheel column, make sure that the protruding tips of the screws on the inner surface of the column do not in any way hinder or interfere with the movement of the rotating shaft, operative parts of the switches or the electrical cables etc. inside the column.

Una vez instalada la cubierta de la columna de dirección, fije el mando rotativo a la ferretería de montaje alineando los cuatro orificios de la parte inferior del mando con los cuatro enganches de la ferretería de montaje. A continuación, deslice el mando hasta que encaje en su sitio como se muestra en la ilustración.

Nota
Si monta el mando rotativo en la columna de dirección, asegúrese de que los extremos de los tornillos que sobresalgan de la superficie interior de la columna no dificulten el movimiento del eje de rotación ni los componentes operativos de los conmutadores o los cables de electricidad, etc., del interior de la columna.

在轉向柱外殼重新裝上以後，把遙控器裝在安裝道具裡。裝時調把遙控器底部的4個小孔對準安裝道具的4個小鉤，然後按照插圖所示，把遙控器插入道具裡。

註
在把遙控器裝在轉向柱外殼時，必須注意轉向柱裡的螺絲釘之尖端，不可刺到或傷害到轉向柱殼裡面的轉軸、開關的操作部分或電線等。



Connection
(XR-C440)

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all ground wires to a common ground point.**
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating.
  If you connect this unit in series with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual component's fuse rating.
  If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery.
  If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

If Your Car has No Accessory Position on the Ignition Key Switch — POWER SELECT switch

The illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear **if your car has no accessory position on the ignition key switch.** To avoid this battery wear, **set the POWER SELECT switch located on the bottom of the unit to the ⓑ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ⓑ position. If you connect an optional power amplifier and do not use the built-in amplifier, he beep tone will be disabled.

Frequency select switch

The AM (FM) tuning interval is factory-set to the 9K (50K) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10K (200K) position before making connections.

POWER SELECT and frequency select switch
POWER SELECT y selector de frecuencia
POWER SELECT及頻率選擇開關
Change the position with a jeweler's screwdriver, etc.
Cambie la posición con un destornillador de relojero, etc.
以珠寶行用的先端尖細的螺絲起子等改變開關位置。

When you change the position of the switch, be sure to press the reset button after the connections are complete.

Reset button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc.

Conexiones

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Antes de realizar las conexiones, desconecte el terminal de puesta a masa de la batería del automóvil a fin de evitar cortocircuitos.
- Conecte los cables conectores de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- Cerciórese de conectar el cable conector de alimentación rojo a un terminal de 12 V positivo que se energice al poner la llave de encendido en la posición para accesorios.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el cable amarillo a un circuito libre del automóvil que tenga una capacidad superior a la del fusible de la unidad.
  Si conecta esta unidad en serie con otros componentes de estéreo, el circuito del automóvil al que se encuentran conectados debe tener una capacidad superior a la de la suma de las capacidades de los fusibles de cada componente.
  Si ningún circuito del automóvil tiene una capacidad tan alta como la del fusible de la unidad, conecte ésta directamente a la batería.
  Si el automóvil no dispone de ningún circuito para conectar esta unidad, conéctela a un circuito con una capacidad superior a la del fusible de la unidad de tal manera que si se funde el fusible de ésta, no se cortará ningún otro circuito.

Si el automóvil no dispone de posición para accesorios en la llave de encendido
— Selector POWER SELECT

La iluminación del panel frontal ha sido ajustada en fábrica para que esté activada aunque la unidad no se encuentre en reproducción. Sin embargo, este ajuste puede provocar cierta descarga de la batería del automóvil **si éste no dispone de posición para accesorios en la llave de encendido.** Para evitar esto, **ponga el selector POWER SELECT, situado en la base de la unidad, en la posición ⓑ y, después, presione el botón de reposición.** La iluminación estará desactivada cuando la unidad no se encuentre en reproducción.

Nota

La alarma de precaución del panel frontal no se activará cuando el selector POWER SELECT se encuentre en la posición ⓑ. Si conecta un amplificador opcional de potencia y no utiliza el incorporado, el pitido se desactivará.

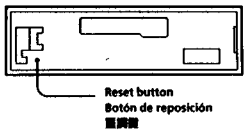
Selector de frecuencia

El intervalo de sintonía de AM (FM) ha sido ajustado en fábrica a la posición 9K (50K). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10K (200K) antes de realizar las conexiones.

Cuando haya cambiado la posición del selector, cerciórese de presionar el botón de reposición después de haber finalizado las conexiones.

Botón de reposición

Cuando haya finalizado la instalación y las conexiones, cerciórese de presionar el botón de reposición con un boligrafo, etc.



線路之連接

注意

- 本機只能使用負極接地 12 V 直流電源。
- 連接以前，先拔取汽車電池的接地端子，以免發生短路。
- **紅色**和**黃色**電源輸入導線必須等所有電線都連接完畢以後才連接。
- 紅色電源輸入導線請連接到汽車發動機點火鑰匙被轉在輔助位置時才通電狀態的正 12 V 電源端子。
- **所有地線都必須連接到同一地點才行。**
- 將黃色導線連接到大於機器保險絲額定容量的沒利用的汽車電路上。
  如果把本機和其他立體聲組成機串聯了，所連接的汽車電路容量必須大於各組成機保險絲容量的總和。
  如果沒有和機器保險絲額定容量一樣大的汽車電路可資利用，可把機器直接連接到電池上。
  若無適當的汽車電路可用於連接本機，請把機器連接到大於機器保險絲容量的汽車電路。如此則萬一當機器的保險絲繞斷了，也不致於切斷其他電路。

若要在汽車發動機點火鑰匙開關沒具輔助位置的汽車裡使用時— POWER SELECT 開關

前板的照明燈在未出廠以前，被設定在即使不使用也會發亮的狀態。**若要在汽車發動機點火鑰匙開關沒具輔助位置的汽車裡使用本機的話，**此照明燈將會一直消耗微量的汽車電池電力。因此為了避免在這種狀態下的電池消耗，**請把本機底下的 POWER SELECT 開關設定在 ⓑ 之處，然後按壓前板的重調鍵。**即不使用本機時，照明燈便不發亮。

註

當您把 POWER SELECT（電源選擇）開關設定於 ⓑ 位置時，前面板用的注意警告將不激活（打開）。如果連接了一選購件功率放大器而不用內裝的放大器，即將不發出嘟聲。

頻率選擇開關

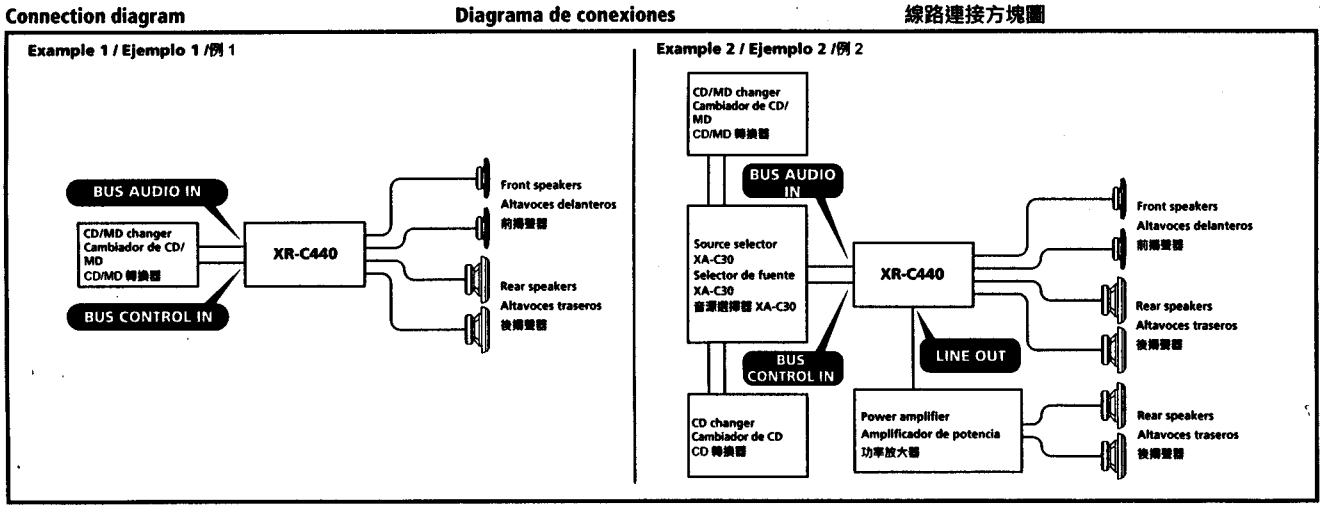
本裝置的 AM (FM) 調諧區間在出廠以前被設定在“9 K (50 K)”位置上。若貴地的頻率區間為“10 kHz (200 kHz)”，連接以前請先把本機機底的選擇開關設定在“10 K (200 K)”之處。

改變開關位置時，請一定在連接好機器後按下一個重調鍵。

重調鍵

安裝和線路之連接完畢以後，請以原子筆等按壓重調鍵。取下前板時，即可看到重調鍵位於本機連接器左邊。

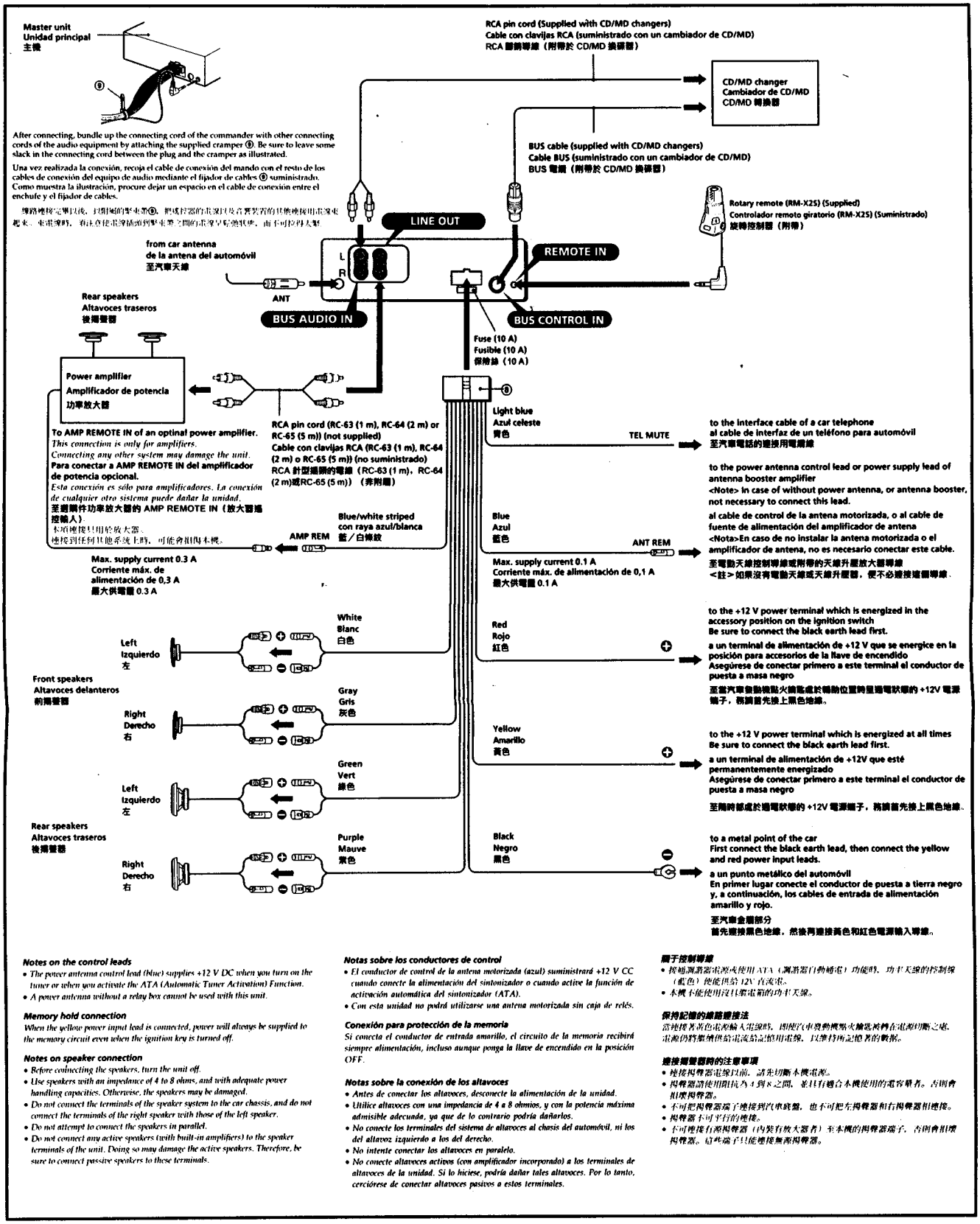
Connection diagram / Diagrama de conexiones / 線路連接方塊圖



Connection example

Ejemplo de conexiones

線路之連接圖例


Master unit
Unidad principal
主機
RCA pin cord (Supplied with CD/MD changers)
Cable con clavijas RCA (suministrado con un cambiador de CD/MD)
RCA 音訊導線（附帶於 CD/MD 換碟器）
CD/MD changer
Cambiador de CD/MD
CD/MD 轉換器
BUS cable (supplied with CD/MD changers)
Cable BUS (suministrado con un cambiador de CD/MD)
BUS 電纜（附帶於 CD/MD 換碟器）
Rotary remote (RM-X2S) (Supplied)
Controlador remoto giratorio (RM-X2S) (Suministrado)
旋轉控制器（附帶）
LINE OUT
REMOTE IN
BUS AUDIO IN
BUS CONTROL IN
from car antenna
de la antena del automóvil
至汽車天線
ANT
Rear speakers
Altavoces traseros
後揚聲器
Power amplifier
Amplificador de potencia
功率放大器
Fuse (10 A)
Fusible (10 A)
保險絲（10 A）
To AMP REMOTE IN of an optinal power amplifier.
This connection is only for amplifiers.
Connecting any other system may damage the unit.
Para conectar a AMP REMOTE IN del amplificador de potencia opcional.
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.
至選購件功率放大器的 AMP REMOTE IN（放大器遙控輸入）
本頭連接只用於放大器。
連接到任何其他系統上時，可能會損壞本機。
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cable con clavijas RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (no suministrado)
RCA 針型插頭的電線（RC-63 (1 m)，RC-64 (2 m)或RC-65 (5 m)）（非附屬）
Blue/white striped
con raya azul/blanca
藍／白條紋
AMP REM
Max. supply current 0.3 A
Corriente máx. de alimentación de 0,3 A
最大供電量 0.3 A
Light blue
Azul celeste
青色
TEL MUTE
to the interface cable of a car telephone
al cable de interfaz de un teléfono para automóvil
至汽車電話的連接用電纜線
to the power antenna control lead or power supply lead of antenna booster amplifier
<Note> In case of without power antenna, or antenna booster, not necessary to connect this lead.
al cable de control de la antena motorizada, o al cable de fuente de alimentación del amplificador de antena
<Nota>En caso de no instalar la antena motorizada o el amplificador de antena, no es necesario conectar este cable.
至電動天線控制導線或附帶的天線升壓放大器導線
<註>如果沒有電動天線或天線升壓器，便不必連接這個導線。
Blue
Azul
藍色
ANT REM
Max. supply current 0.1 A
Corriente máx. de alimentación de 0,1 A
最大供電量 0.1 A
White
Blanc
白色
Left
Izquierdo
左
Front speakers
Altavoces delanteros
前揚聲器
Gray
Gris
灰色
Right
Derecho
右
Green
Vert
綠色
Left
Izquierdo
左
Rear speakers
Altavoces traseros
後揚聲器
Purple
Mauve
紫色
Right
Derecho
右
Red
Rojo
紅色
to the +12 V power terminal which is energized in the accessory position on the ignition switch
Be sure to connect the black earth lead first.
a un terminal de alimentación de +12 V que se energice en la posición para accesorios de la llave de encendido
Asegúrese de conectar primero a este terminal el conductor de puesta a masa negro
至當汽車發動機點火鎖匙處於輔助位置時通電狀態的 +12V 電源端子，務請首先接上黑色地線。
Yellow
Amarillo
黃色
to the +12 V power terminal which is energized at all times
Be sure to connect the black earth lead first.
a un terminal de alimentación de +12V que esté permanentemente energizado
Asegúrese de conectar primero a este terminal el conductor de puesta a masa negro
至隨時都處於通電狀態的 +12V 電源端子，務請首先接上黑色地線。
Black
Negro
黑色
to a metal point of the car
First connect the black earth lead, then connect the yellow and red power input leads.
a un punto metálico del automóvil
En primer lugar conecte el conductor de puesta a tierra negro y, a continuación, los cables de entrada de alimentación amarillo y rojo.
至汽車金屬部分
首先連接黑色地線，然後再連接黃色和紅色電源輸入導線。

Notes on the control leads

- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) Function.*
- *A power antenna without a relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Notas sobre los conductores de control

- *El conductor de control de la antena motorizada (azul) suministrará +12 V CC cuando conecte la alimentación del sintonizador o cuando active la función de activación automática del sintonizador (ATA).*
- *Con esta unidad no podrá utilizarse una antena motorizada sin caja de relés.*

Conexión para protección de la memoria

Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.*
- *No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.*
- *No intente conectar los altavoces en paralelo.*
- *No conecte altavoces activos (con amplificador incorporado) a los terminales de altavoces de la unidad. Si lo hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

關于控制導線

- *接通調諧器電源或使用 ATA（調諧器自動補電）功能時，功率天線的控制線（藍色）便能供給 12V 直流電。*
- *本機不能使用沒且繼電箱的功率天線。*

保持記憶的線路連接法

當連接黃色電源輸入電線時，即使汽車發動機點火鑰匙被轉在電源切斷之處，電源仍將繼續供給電流給記憶用電線，以維持所記憶著的數據。

連接揚聲器時的注意事項

- *連接揚聲器電線以前，請先切斷本機電源。*
- *揚聲器請使用阻抗為 4 到 8 之間，並且有適合本機使用的電容量者。否則會相壞揚聲器。*
- *不可把揚聲器端子連接到汽車底盤，也不可把左揚聲器和右揚聲器相連接。*
- *揚聲器不可平行的連接。*
- *不可連接有源揚聲器（內裝有放大器者）至本機的揚聲器端子，否則會相壞揚聲器。這些端子只能連接無源揚聲器。*

Note for Connecting

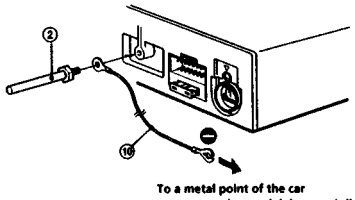
If there is alternator noise (a whining sound when the engine increases speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord ⑩. Connect the ground cord to the master unit with part ② as shown in the illustration.

Nota sobre conexión

Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unida principal a teirra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis ⑩ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza ② como se muesta en la ilustración.

連接須知

如果發現有交流聲（當汽車發動機加速時發生的哼聲）時，請用附帶的底盤接地線 ⑩ 將本機接地到汽車的金屬車體部分。利用如圖所示部件 ② 連接主機的接地線。



Connection (XR-C450)

Caution

- This unit is designed for negative ground 12 V DC operation only.
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is energized when the ignition key is in the accessory position.
- **Run all ground wires to a common ground point.**
- Connect the yellow cord to a free car circuit rated higher than the unit's fuse rating.
  If you connect this unit in series with other stereo components, the car circuit they are connected to must be rated higher than the sum of the individual component's fuse rating.
  If there are no car circuits rated as high as the unit's fuse rating, connect the unit directly to the battery.
  If no car circuits are available for connecting this unit, connect the unit to a car circuit rated higher than the unit's fuse rating in such a way that if the unit blows its fuse, no other circuits will be cut off.

If your car has no accessory position on the ignition key switch — POWER SELECT switch

The illumination on the front panel is factory set to be turned on even while the unit is not in use. However, this setting may cause some car battery wear if **your car has no accessory position on the ignition key switch.** To avoid this battery wear, **set the POWER SELECT switch located on the bottom of the unit to the ⓑ position, then press the reset button.** The illumination is reset to stay off while the unit is not in use.

Note

The caution alarm for the front panel is not activated when the POWER SELECT switch is set to the ⓑ position.

Frequency select switch (E, Saudi Arabia model)

The MW (FM) tuning interval is factory-set to the 9K (50 K) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10 K (200 K) position before making connections.

Conexiones

Precauciones

- Esta unidad ha sido diseñada para alimentarse con 12 V CC, negativo a masa, solamente.
- Antes de realizar las conexiones, desconecte el terminal de puesta a masa de la batería del automóvil a fin de evitar cortocircuitos.
- Conecte los cables conectores de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- Cerciórese de conectar el cable conector de alimentación rojo a un terminal de 12 V positivo que se energice al poner la llave de encendido en la posición para accesorios.
- **Conecte todos los conductores de puesta a masa a un punto común.**
- Conecte el cable amarillo a un circuito libre del automóvil que tenga una capacidad superior a la del fusible de la unidad.
  Si conecta esta unidad en serie con otros componentes de estéreo, el circuito del automóvil al que se encuentran conectados debe tener una capacidad superior a la de la suma de las capacidades de los fusibles de cada componente.
  Si ningún circuito del automóvil tiene una capacidad tan alta como la del fusible de la unidad, conecte ésta directamente a la batería.
  Si el automóvil no dispone de ningún circuito para conectar esta unidad, conéctela a un circuito con una capacidad superior a la del fusible de la unidad de tal manera que si se funde el fusible de ésta, no se cortará ningún otro circuito.

Si el automóvil no dispone de posición para accesorios en la llave de encendido — Selector POWER SELECT

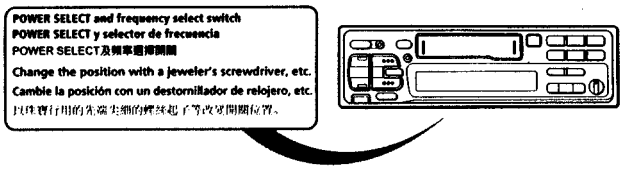
La iluminación del panel frontal ha sido ajustada en fábrica para que esté activada aunque la unidad no se encuentre en reproducción. Sin embargo, este ajuste puede provocar cierta descarga de la batería del automóvil **si éste no dispone de posición para accesorios en la llave de encendido.** Para evitar esto, **ponga el selector POWER SELECT, situado en la base de la unidad, en la posición ⓑ y, después, presione el botón de reposición.** La iluminación estará desactivada cuando la unidad no se encuentre en reproducción.

Nota

La alarma de precaución del panel frontal no se activará cuando el selector POWER SELECT se encuentre en la posición ⓑ.

Selector de frecuencia

El intervalo de sintonía de MW (FM) ha sido ajustado en fábrica a la posición 9 K (50 K). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10 kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10 K (200 K) antes de realizar las conexiones.


POWER SELECT and frequency select switch
POWER SELECT y selector de frecuencia
POWER SELECT及頻率選擇開關
Change the position with a jeweler's screwdriver, etc.
Cambie la posición con un destornillador de relojero, etc.
以珠寶行用的先端尖細的螺絲起子等改變開關位置。

When you change the position of the switch, be sure to press one of the reset button after the connections are complete.

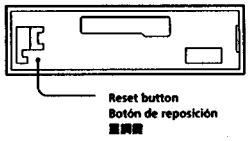
Cuando haya cambiado la posición del selector, cerciórese de presionar uno de los botones de reposición después de haber finalizado las conexiones.

Reset button

When the installation and connections are complete, be sure to press the reset button with a ballpoint pen etc. The reset button is located on the left of the connector on the unit side when the front panel is detached.

Botón de reposición

Cuando haya finalizado la instalación y las conexiones, cerciórese de presionar el botón de reposición con un bolígrafo, etc. El botón de reposición se encuentra a la izquierda del conector de la parte lateral de la unidad, una vez extraído el del panel frontal.



線路之連接

注意

- 本機只能使用負極接地 12 V 直流電源。
- 連接以前，先拔取汽車電池的接地端子，以免發生短路。
- **紅色**和**黃色**電源輸入導線必須等所有電線都連接完畢以後才連接。
- 紅色電源輸入導線請連接到汽車發動機點火鑰匙被轉在輔助位置時才通電狀態的正 12 V 電源端子。
- **所有地線都必須連接到同一地點才行。**
- 將黃色導線連接到大於機器保險絲額定容量的沒利用的汽車電路上。
  如果把本機和其他立體聲組成機串聯了，所連接的汽車電路容量必須大於各組成機保險絲容量的總和。
  如果沒有和機器保險絲額定容量一樣大的汽車電路可資利用，可把機器直接連接到電池上。
  若無適當的汽車電路可用於連接本機，請把機器連接到大於機器保險絲容量的汽車電路。如此則萬一當機器的保險絲繞斷了，也不致於切斷其他電路。

若要在汽車發動機點火鑰匙開關沒具輔助位置的汽車裡使用時— POWER SELECT 開關

前板的照明燈在未出廠以前，被設定在即使不使用也會發亮的狀態。**若要在汽車發動機點火鑰匙開關沒具輔助位置的汽車裡使用本機的話，**此照明燈將會一直消耗微量的汽車電池電力。因此為了避免在這種狀態下的電池消耗，**請把本機底下的 POWER SELECT 開關設定在 ⓑ 之處，然後按壓前板的重調鍵。**倒不使用本機時，照明燈便不發亮。

註

若您把 POWER SELECT（電源選擇）開關設定於 ⓑ 位置時，前面板用的注意警告將不激活（打開）。

頻率選擇開關

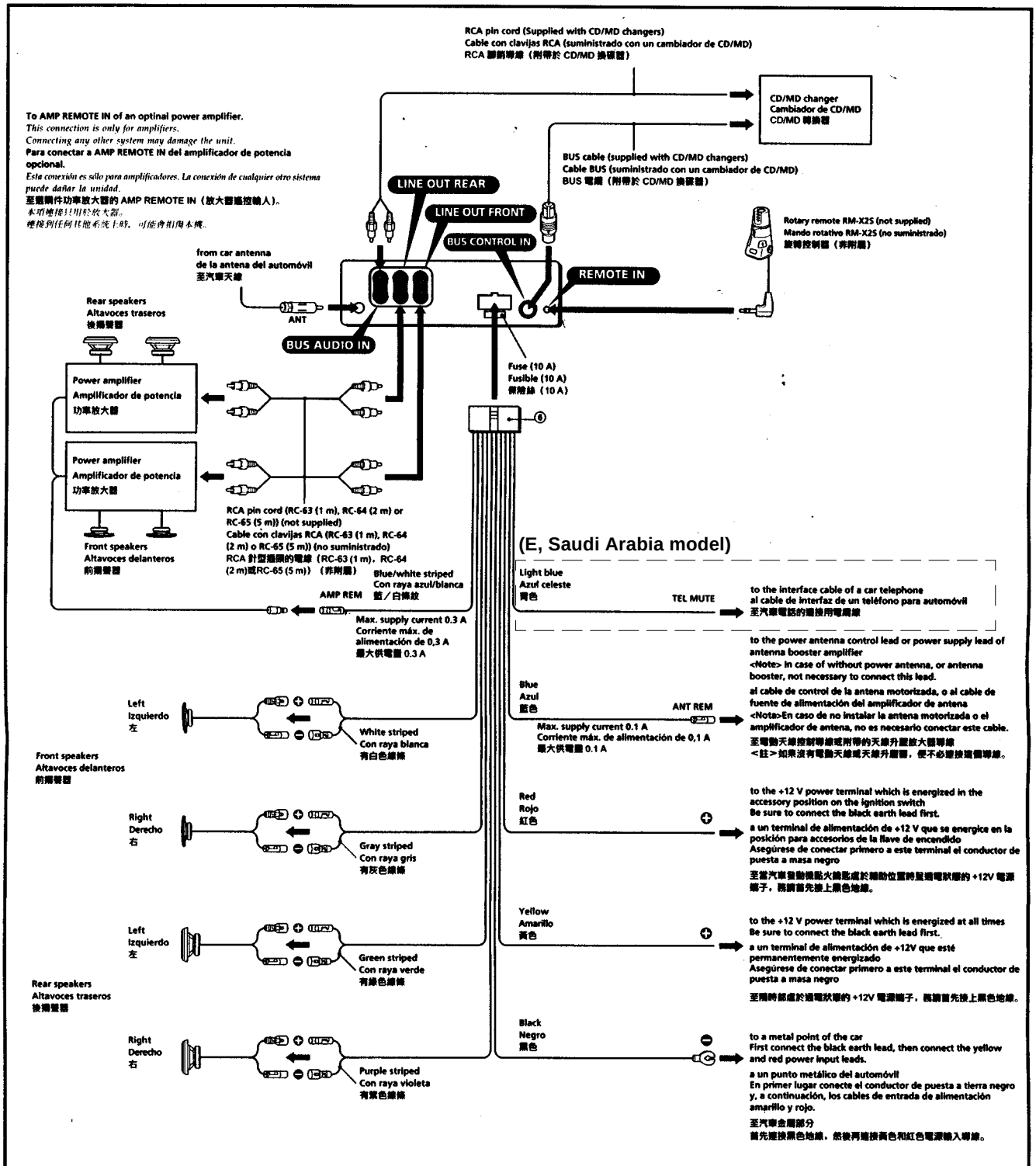
本裝置的 MW (FM) 調諧區間在出廠以前被設定在 "9 K (50 K)" 位置上。若貴地的頻率區間為 "10 kHz (200 kHz)"，連接以前請先把本機機底的選擇開關設定在 "10 K (200 K)" 之處。

改變開關位置時，請一定在連接好機器後按下一個重調鍵。

Connection example

Ejemplo de conexiones

線路之連接圖例


RCA pin cord (Supplied with CD/MD changers)
Cable con clavijas RCA (suministrado con un cambiador de CD/MD)
RCA 腳銷導線（附帶於 CD/MD 換碟器）
CD/MD changer
Cambiador de CD/MD
CD/MD 轉換器
To AMP REMOTE IN of an optinal power amplifier.
This connection is only for amplifiers.
Connecting any other system may damage the unit.
Para conectar a AMP REMOTE IN del amplificador de potencia opcional.
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.
至選購件功率放大器的 AMP REMOTE IN（放大器遙控輸入）。
本項連接只用於放大器。
連接到任何其他系統上時，可能會損壞本機。
BUS cable (supplied with CD/MD changers)
Cable BUS (suministrado con un cambiador de CD/MD)
BUS 電纜（附帶於 CD/MD 換碟器）
LINE OUT REAR
LINE OUT FRONT
BUS CONTROL IN
REMOTE IN
Rotary remote RM-X2S (not supplied)
Mando rotativo RM-X2S (no suministrado)
旋轉控制器（非附屬）
from car antenna
de la antena del automóvil
至汽車天線
ANT
BUS AUDIO IN
Rear speakers
Altavoces traseros
後揚聲器
Power amplifier
Amplificador de potencia
功率放大器
Power amplifier
Amplificador de potencia
功率放大器
Front speakers
Altavoces delanteros
前揚聲器
RCA pin cord (RC-63 (1 m), RC-64 (2 m) or RC-65 (5 m)) (not supplied)
Cable con clavijas RCA (RC-63 (1 m), RC-64 (2 m) o RC-65 (5 m)) (no suministrado)
RCA 針型插頭的電線（RC-63 (1 m)，RC-64 (2 m)或RC-65 (5 m)）（非附屬）
Fuse (10 A)
Fusible (10 A)
保險絲（10 A）
Blue/white striped
Con raya azul/blanca
藍／白條紋
AMP REM
Max. supply current 0.3 A
Corriente máx. de alimentación de 0,3 A
最大供電量 0.3 A
(E, Saudi Arabia model)
Light blue
Azul celeste
青色
TEL MUTE
to the interface cable of a car telephone
al cable de interfaz de un teléfono para automóvil
至汽車電話的連接用電纜線
to the power antenna control lead or power supply lead of antenna booster amplifier
<Note> In case of without power antenna, or antenna booster, not necessary to connect this lead.
al cable de control de la antena motorizada, o al cable de fuente de alimentación del amplificador de antena
<Nota>En caso de no instalar la antena motorizada o el amplificador de antena, no es necesario conectar este cable.
至電動天線控制導線或附帶的天線升壓放大器導線
<註>如果沒有電動天線或天線升壓器，便不必連接這個導線。
Blue
Azul
藍色
ANT REM
Max. supply current 0.1 A
Corriente máx. de alimentación de 0,1 A
最大供電量 0.1 A
Left
Izquierdo
左
White striped
Con raya blanca
有白色線條
Front speakers
Altavoces delanteros
前揚聲器
Right
Derecho
右
Gray striped
Con raya gris
有灰色線條
Red
Rojo
紅色
to the +12 V power terminal which is energized in the accessory position on the ignition switch
Be sure to connect the black earth lead first.
a un terminal de alimentación de +12 V que se energice en la posición para accesorios de la llave de encendido
Asegúrese de conectar primero a este terminal el conductor de puesta a masa negro
至當汽車發動機點火鑰匙處於輔助位置時呈通電狀態的 +12V 電源端子，務請首先接上黑色地線。
Left
Izquierdo
左
Green striped
Con raya verde
有綠色線條
Rear speakers
Altavoces traseros
後揚聲器
Yellow
Amarillo
黃色
to the +12 V power terminal which is energized at all times
Be sure to connect the black earth lead first.
a un terminal de alimentación de +12V que esté permanentemente energizado
Asegúrese de conectar primero a este terminal el conductor de puesta a masa negro
至隨時都處於通電狀態的 +12V 電源端子，務請首先接上黑色地線。
Right
Derecho
右
Purple striped
Con raya violeta
有紫色線條
Black
Negro
黑色
to a metal point of the car
First connect the black earth lead, then connect the yellow and red power input leads.
a un punto metálico del automóvil
En primer lugar conecte el conductor de puesta a tierra negro y, a continuación, los cables de entrada de alimentación amarillo y rojo.
至汽車金屬部分
首先連接黑色地線，然後再連接黃色和紅色電源輸入導線。

Notes on the control leads

- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner or when you activate the ATA (Automatic Tuner Activation) Function.*
- *A power antenna without a relay box cannot be used with this unit.*

Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities. Otherwise, the speakers may be damaged.*
- *Do not connect the terminals of the speaker system to the car chassis, and do not connect the terminals of the right speaker with those of the left speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Do not connect any active speakers (with built-in amplifiers) to the speaker terminals of the unit. Doing so may damage the active speakers. Therefore, be sure to connect passive speakers to these terminals.*

Notas sobre los conductores de control

- *El conductor de control de la antena motorizada (azul) suministrará +12 V CC cuando conecte la alimentación del sintonizador o cuando active la función de activación automática del sintonizador (ATA).*
- *Con esta unidad no podrá utilizarse una antena motorizada sin caja de relés.*

Conexión para protección de la memoria

Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, incluso aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces

- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 ohmios, y con la potencia máxima admisible adecuada, ya que de lo contrario podría dañarlos.*
- *No conecte los terminales del sistema de altavoces al chasis del automóvil, ni los del altavoz izquierdo a los del derecho.*
- *No intente conectar los altavoces en paralelo.*
- *No conecte altavoces activos (con amplificador incorporado) a los terminales de altavoces de la unidad. Si lo hiciese, podría dañar tales altavoces. Por lo tanto, cerciórese de conectar altavoces pasivos a estos terminales.*

關于控制導線

- *接通調諧器電源或使用 ATA（調諧器自動通電）功能時，功率天線的控制線（藍色）便能供給 12V 直流電。*
- *本機不能使用沒具繼電箱的功率天線。*

保持記憶的線路連接法

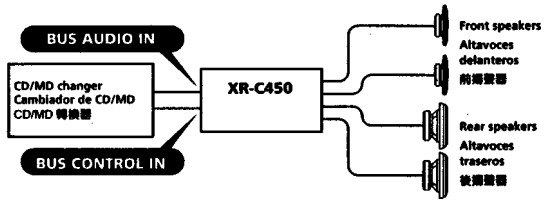
本連接著黃色電源輸入電線時，即使汽車發動機點火鑰匙被轉在電源切斷之處，電源仍將繼續供給電流給記憶用電線，以維持所記憶著的數据。

連接揚聲器時的注意事項

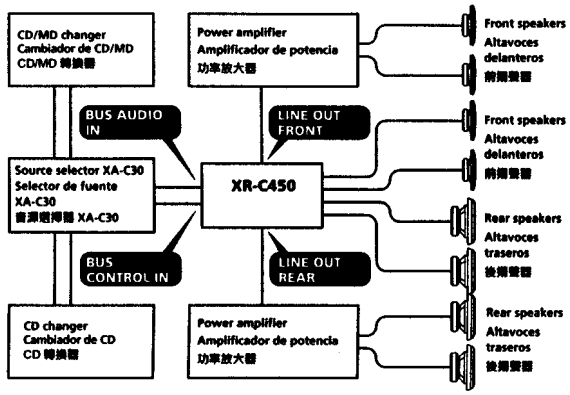
- *連接揚聲器電線以前，請先切斷本機電源。*
- *揚聲器請使用阻抗為 4 到 8 之間，並具有適合本機使用的電容量者。否則會損壞揚聲器。*
- *不可把揚聲器端子連接到汽車底盤，也不可把左揚聲器和右揚聲器相連接。*
- *揚聲器不可平行的連接。*
- *不可連接有源揚聲器（內裝有放大器者）至本機的揚聲器端子，否則會損壞揚聲器。這些端子只能連接無源揚聲器。*

Connection diagram/Diagrama de conexiones/線路連接方塊圖

Example 1 / Ejemplo 1 /例 1



Example 2 / Ejemplo 2 /例 2



If you connect and optional power amplifier and do not use the built-in amplifier, the beep-tone will be disabled.
For connecting two or more changers, the source selector XA-C30 (optional) and the BUS cable RC-61 (1 m) or RC-62 (2 m) (optional) are necessary.

Si conecta un amplificador opcional de potencia y no utiliza el incorporado, el pitido se desactivará.
Cuando desee conectar dos o más cambiadores, necesitará un selector de fuente XA-C30 (opcional) y un cable BUS RC-61 (1 m) o RC-62 (2 m) (opcional).

如果連接了一選購件功率放大器而不用內裝的放大器，即將不發出嘟聲。
要連接兩個，或兩個以上的換碟器時，便須使用聲源選擇器 XA-C30（選購件）和 BUS 電纜 RC-61（1 米）或 RC-62（2 米）（選購件）。

(E, Saudi Arabia model)

Note for Connecting

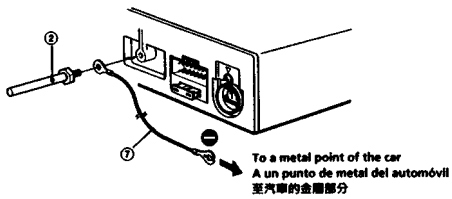
If there is alternator noise (a whining sound when raising engine speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord ⑦. Connect the ground cord to the master unit with part ② as shown in the illustration.

Nota sobre conexión

Si el alternador emite ruido (un zumbido al aumentar la velocidad del motor), conecte la unidad principal a tierra y, para ello, enchúfela a un punto de metal del automóvil mediante el cable de toma a tierra del chasis ⑦ suministrado. Conecte el cable de toma a tierra a la unidad principal con la pieza ② como se muestra en la ilustración.

連接須知

如果發現有交流聲（當汽車發動機加速時發生的哼聲）時，請用附帶的底盤接地線 ⑦ 將本機接地到汽車的金屬車體部分。利用如圖所示部件 ② 連接主機的接地線。



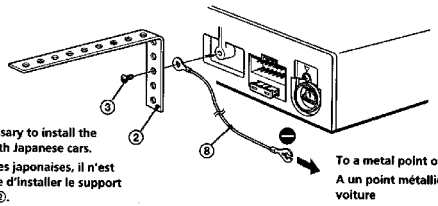
(US, Canadian model)

Note for Connecting

If there is alternator noise (a whining sound when raising engine speed), ground the master unit by connecting it to a metal point of the car with the supplied chassis ground cord. Connect the ground cord to the master unit with a screw ③. (See illustration.)

Remarque sur le raccordement

Si l'alternateur génère des interférences (pleurage lorsque le régime moteur augmente), reliez l'appareil principal à la masse en le raccordant à un point métallique de la voiture au moyen du fil de masse pour châssis fourni. Raccordez le fil de masse à l'appareil principal à l'aide d'une vis ③. (Voir illustration.)

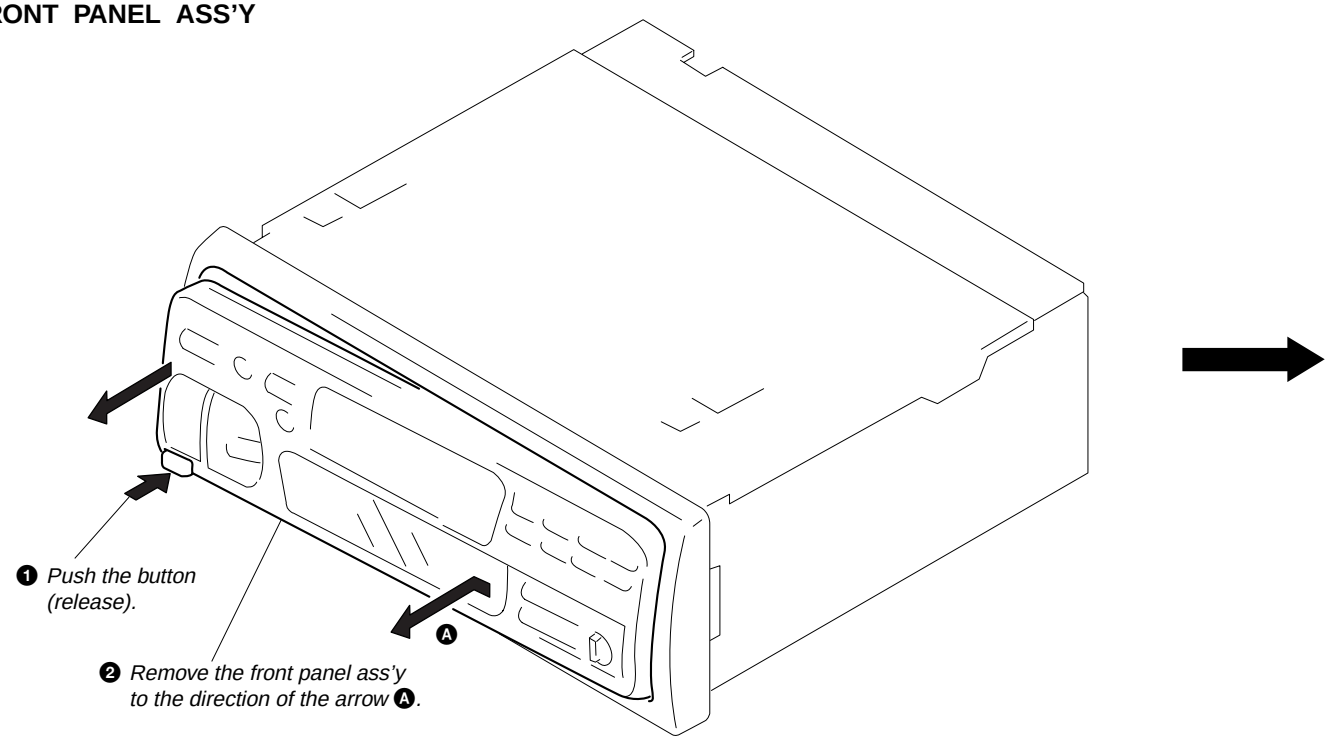


It is not necessary to install the bracket ② with Japanese cars.
Sur les voitures japonaises, il n'est pas nécessaire d'installer le support de montage ②.

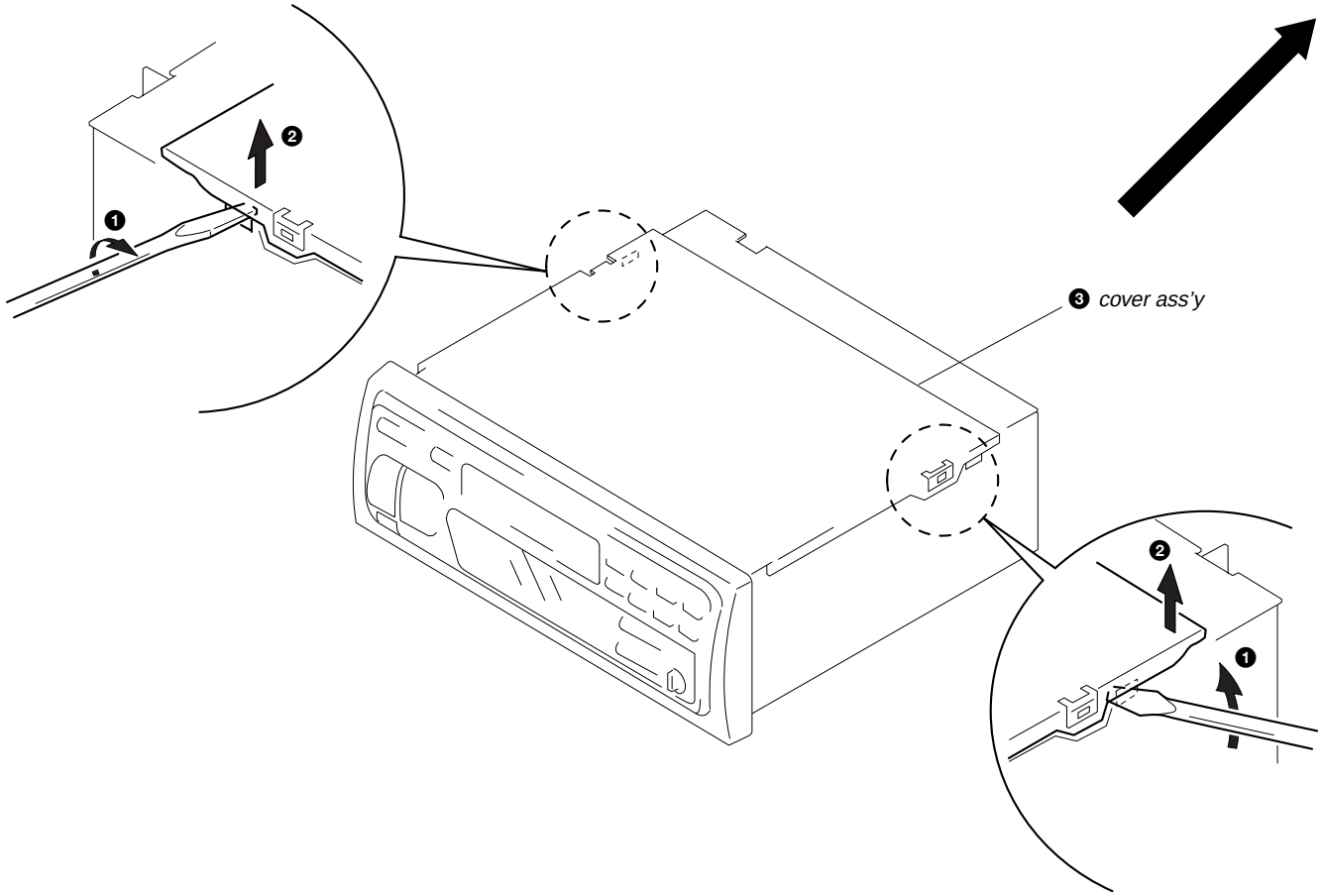
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

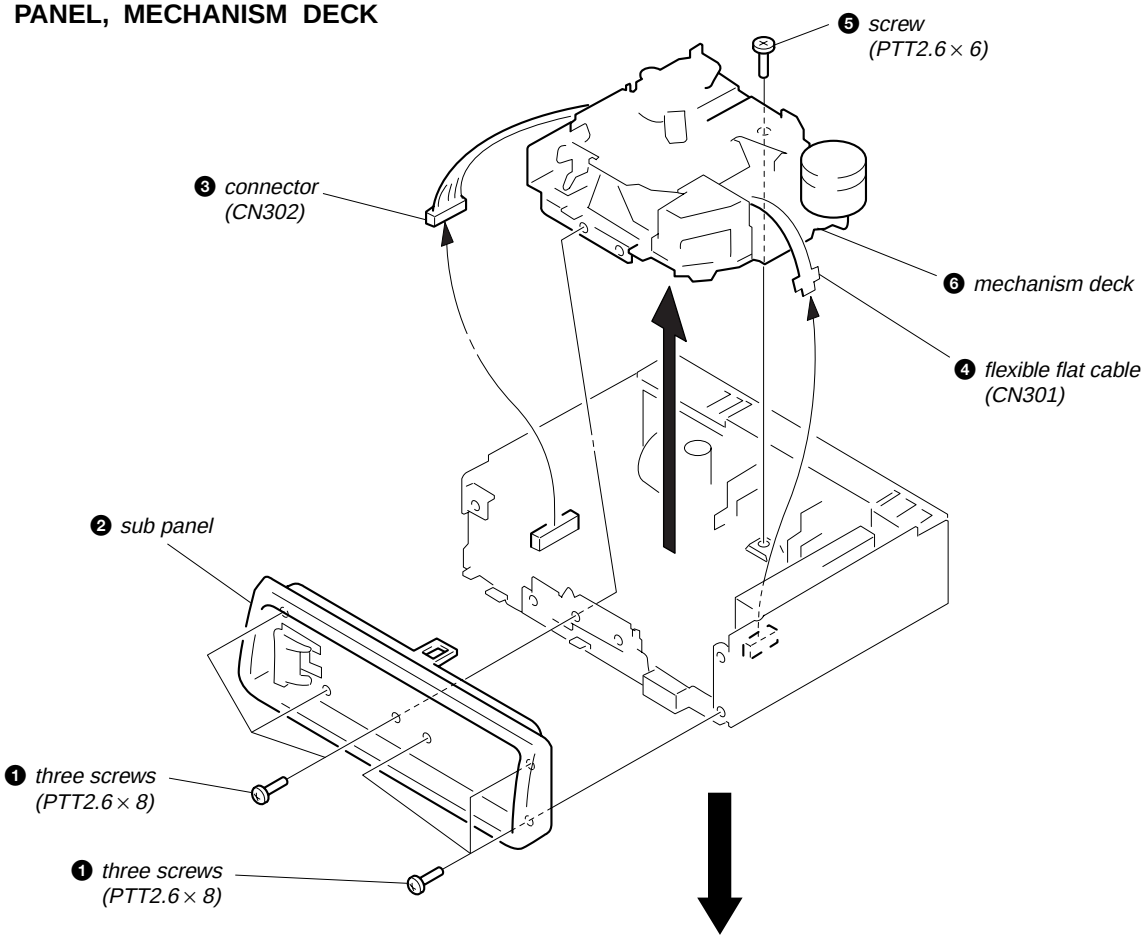
FRONT PANEL ASS'Y



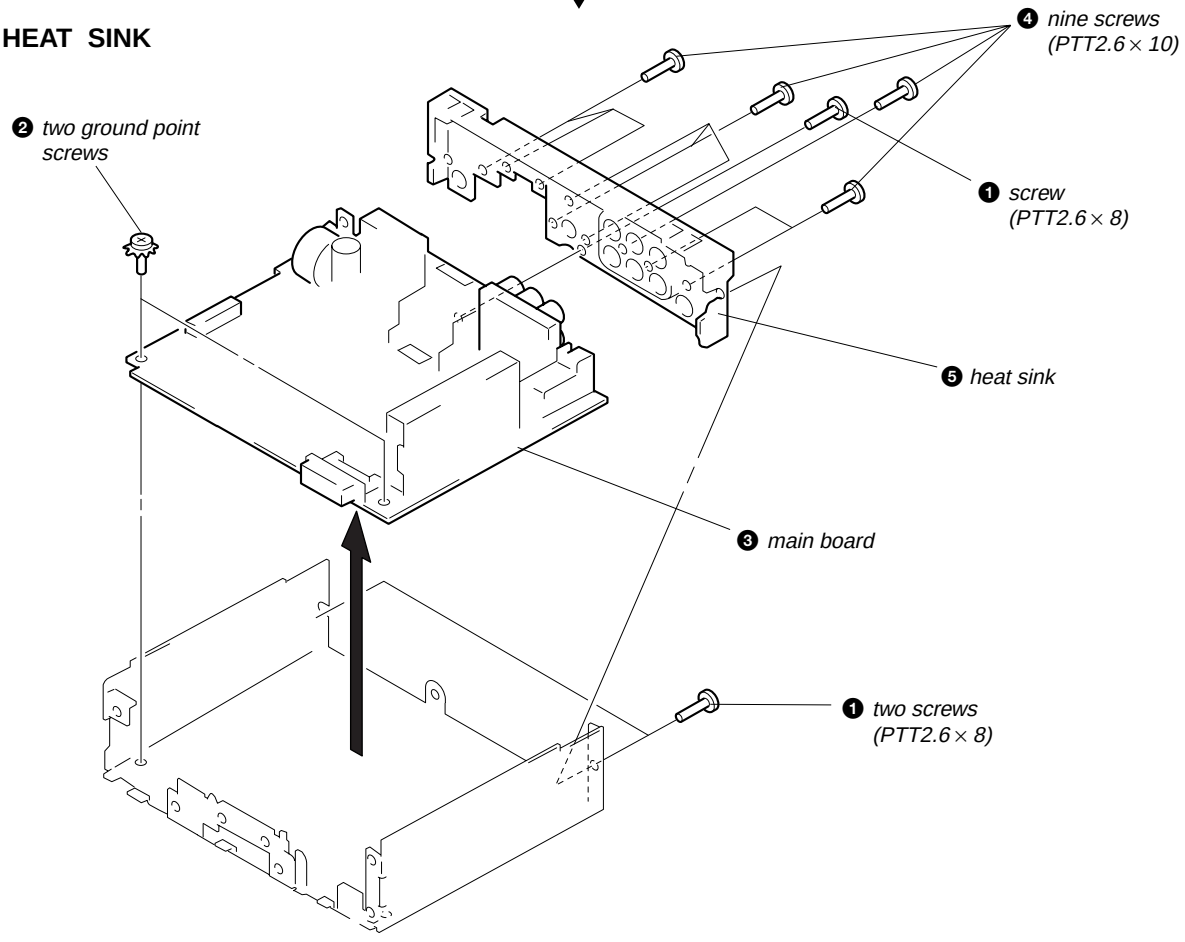
COVER ASS'Y



SUB PANEL, MECHANISM DECK



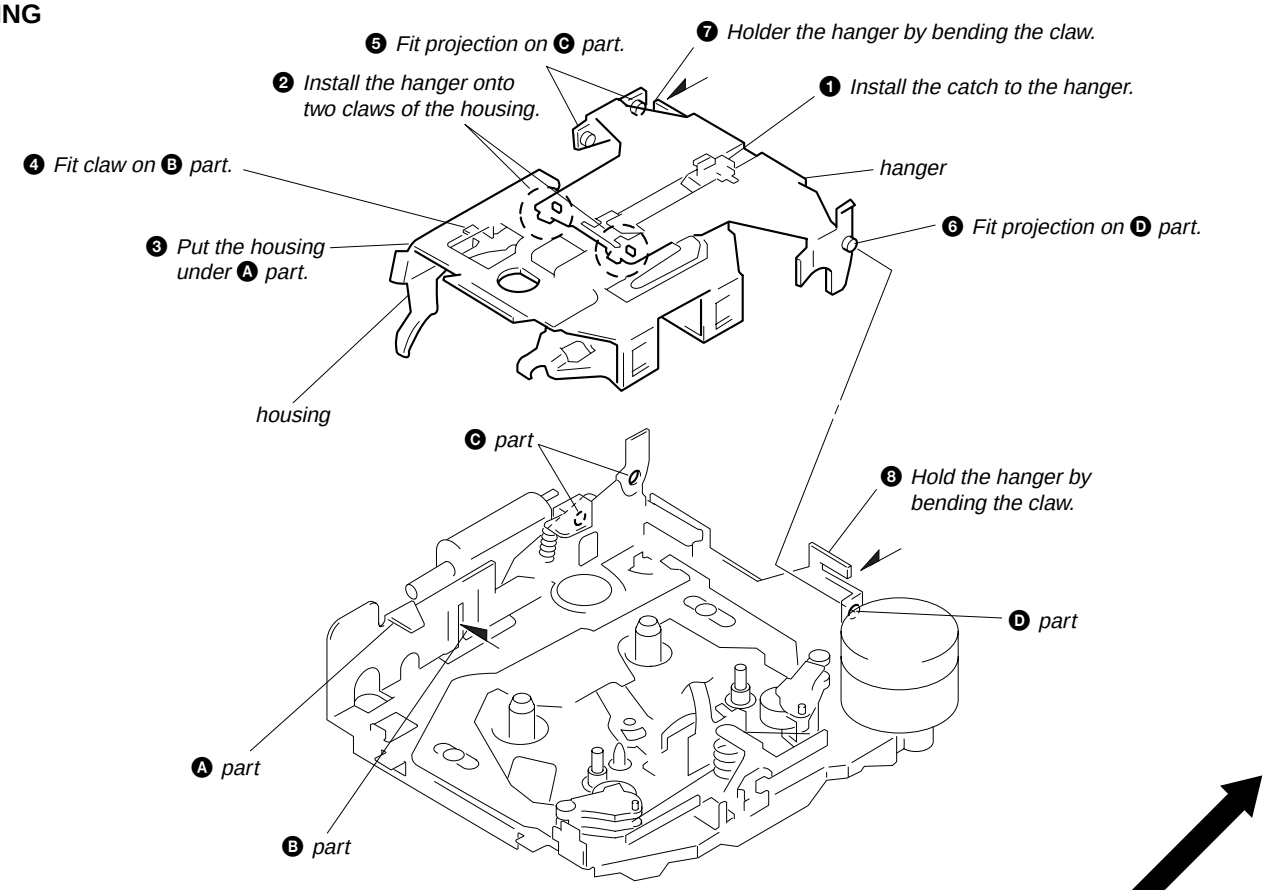
MAIN BOARD, HEAT SINK



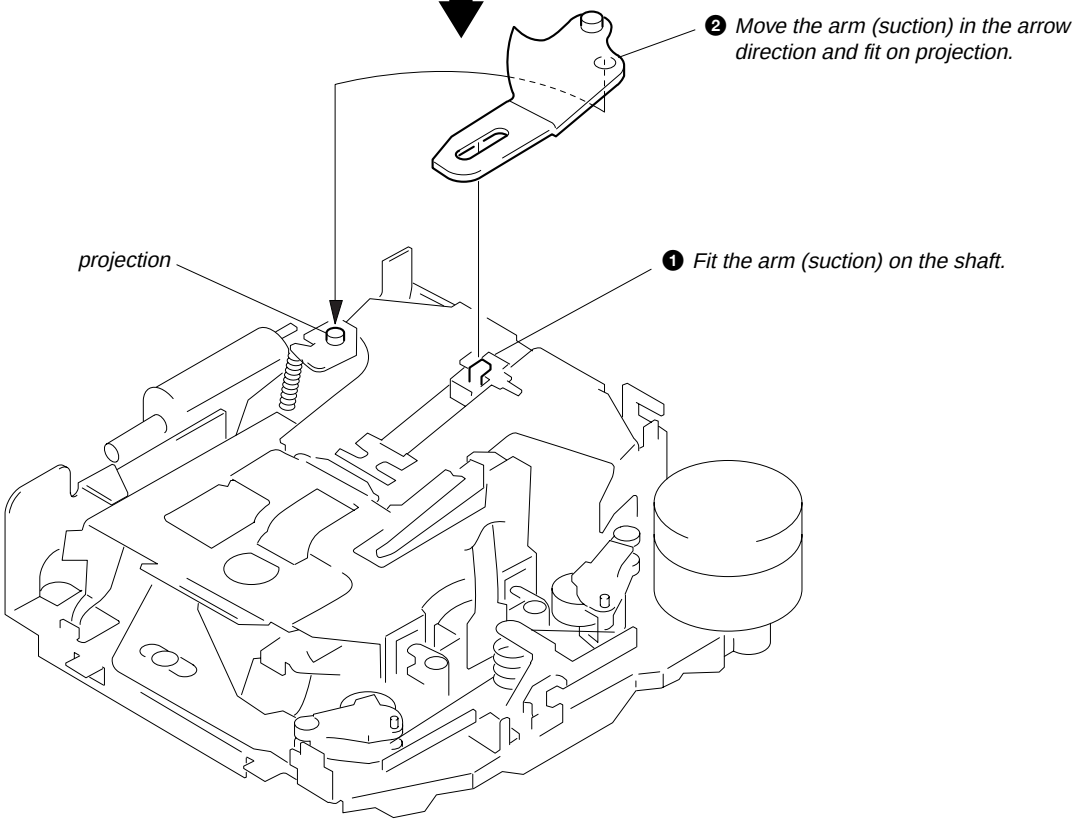
SECTION 3
ASSEMBLY OF MECHANISM DECK

Note: Follow the assembly procedure in the numerical order given.

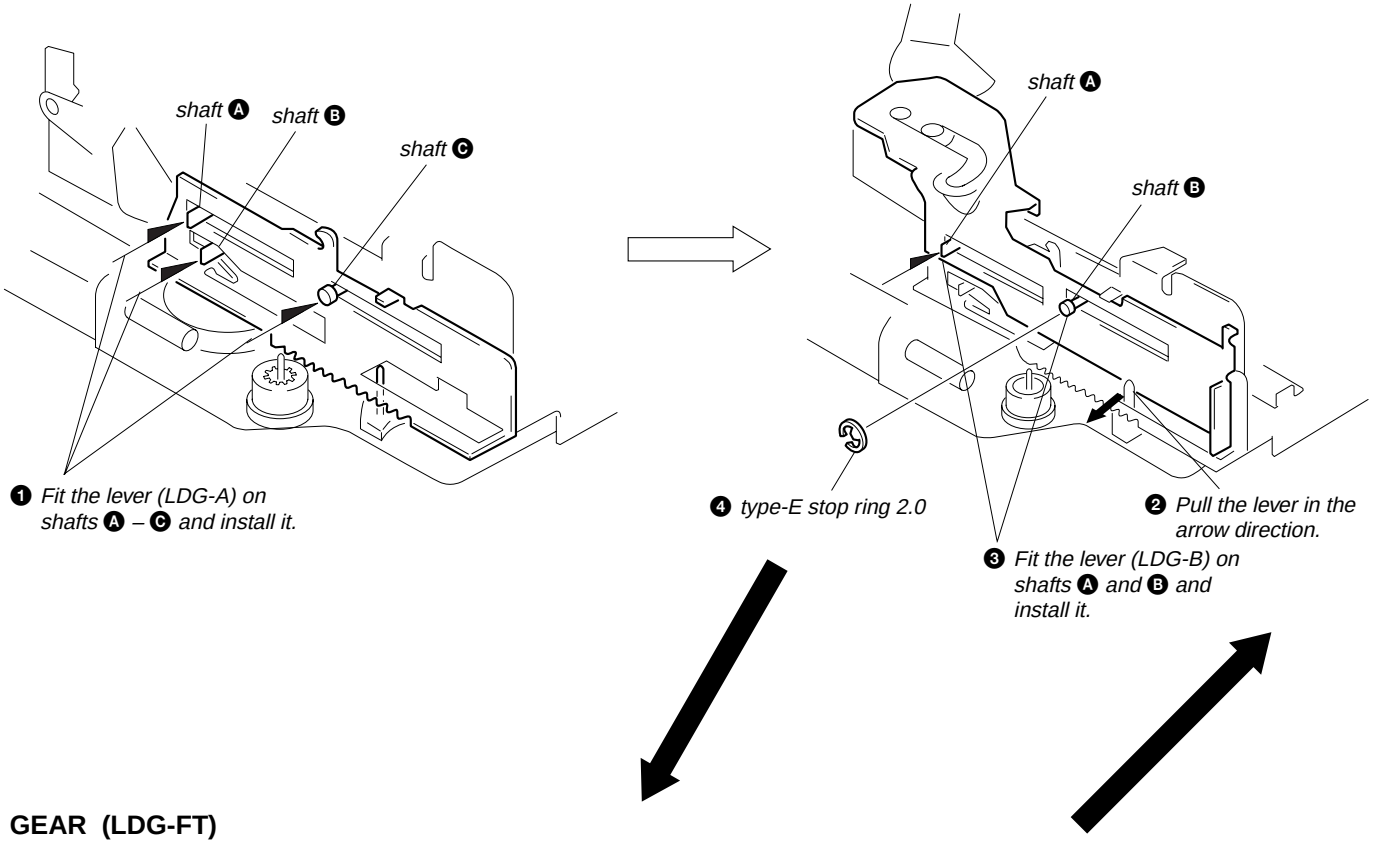
HOUSING


❺ Fit projection on Ⓒ part.
❼ Holder the hanger by bending the claw.
❷ Install the hanger onto two claws of the housing.
❶ Install the catch to the hanger.
❹ Fit claw on Ⓑ part.
hanger
❻ Fit projection on Ⓓ part.
❸ Put the housing under Ⓐ part.
housing
Ⓒ part
❽ Hold the hanger by bending the claw.
Ⓓ part
Ⓐ part
Ⓑ part

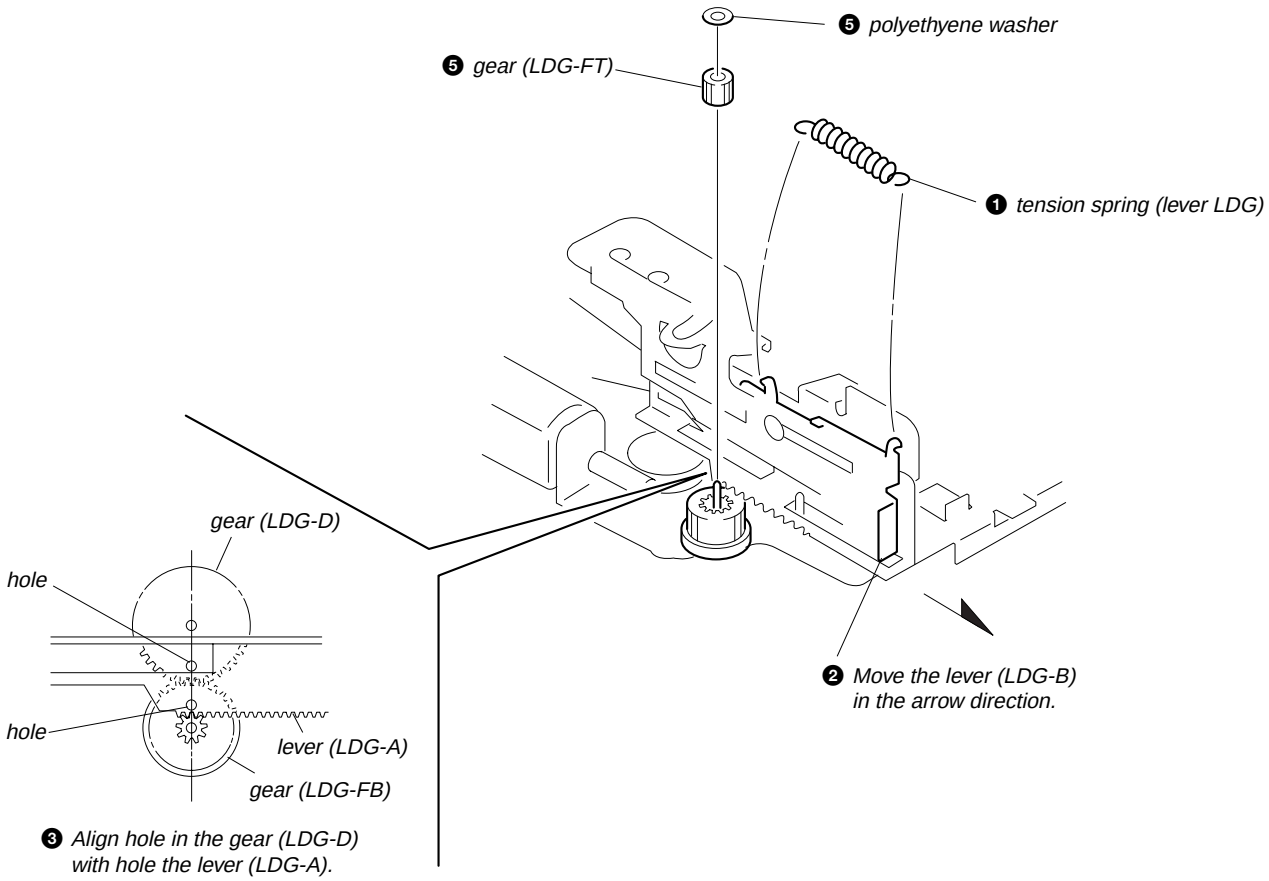
ARM (SUCTION)



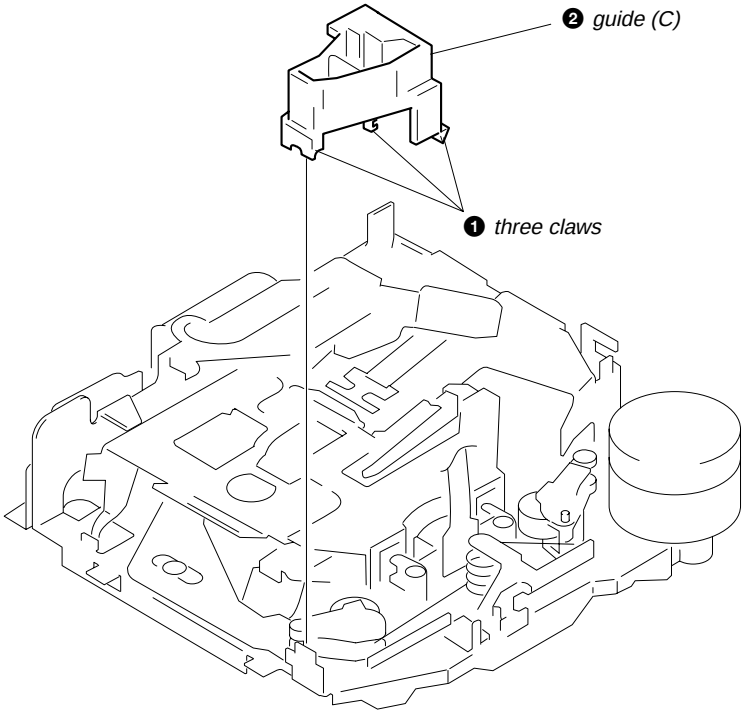
LEVER (LDG-A) / (LDG-B)


shaft Ⓐ
shaft Ⓑ
shaft Ⓒ
❶ Fit the lever (LDG-A) on shafts Ⓐ – Ⓒ and install it.
shaft Ⓐ
shaft Ⓑ
❹ type-E stop ring 2.0
❷ Pull the lever in the arrow direction.
❸ Fit the lever (LDG-B) on shafts Ⓐ and Ⓑ and install it.

GEAR (LDG-FT)


❺ polyethyene washer
❺ gear (LDG-FT)
❶ tension spring (lever LDG)
gear (LDG-D)
hole
hole
lever (LDG-A)
gear (LDG-FB)
❸ Align hole in the gear (LDG-D) with hole the lever (LDG-A).
❷ Move the lever (LDG-B) in the arrow direction.

GUIDE (C)



SECTION 4
MECHANICAL ADJUSTMENTS

1. Clean the following parts with a denatured-alcohol-moistened swab:
   playback head pinch roller
   rubber belt capstan
   idles
2. Demagnetize the playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torqu Meter	Meter Reading
Forward	CQ-102C	30 - 65 g·cm (0.42 - 0.90 oz·inch)
Forward Back Tension	CQ-102C	0.5 - 4.5g·cm (0.01 - 0.06 oz·inch)
Reverse	CQ-102RC	30 - 65 g·cm (0.42 - 0.90 oz·inch)
Reverse Back Tension	CA-102RC	0.5 - 4.5g·cm (0.01 - 0.06 oz·inch)
FF, REW	CQ-201B	60 - 200 g·cm (0.83 - 2.78 oz·inch)

• Tape Tension Measurement

Mode	Torqu Meter	Meter Reading
Forward	CQ-403A	more than 90 g (more than 3.18 oz)
Reverse	CQ-403R	more than 90 g (more than 3.18 oz)

SECTION 5
ELECTRICAL ADJUSTMENTS

TEST MODE

This set have the test mode function. In the test mode, FM Auto Scan/Stop Level and AM (MW) Auto Scan/Stop Level adjustments can be performed easier than it in ordinary procedure.

<Set the Test Mode>
1. Set the “OFF” mode.
2. Push the preset 4 button.
3. Push the preset 5 button.
4. Press the preset 1 button for more than two seconds.
5. Then the display indicates all lights, the test mode is set.

<Release the Test mode>
1. Push the “OFF” button.

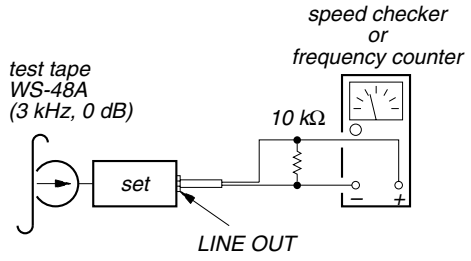
See the adjustment location from on page 22 for the adjustment.

TAPE DECK SECTION | **0 dB=0.775 V**

Tape Speed Adjustment

Procedure:

1. Put the set into the FWD PB mode.



Specification: Constant speed

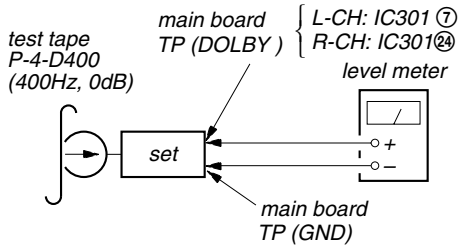
Speed checker	Frequency counter
–1.5 to +2.5%	2,955 to 3,075Hz

Adjustment Location: See page 22.

DOLBY Level Adjustment

Setting:

Preset 3 (DOLBY) button	:	OFF
SEL (BAS) button	:	Center
SEL (TRE) button	:	Center
SEL (BAL) button	:	Center
SEL (FAD) button	:	Center
SEL (VOL) button	:	Maximum
D-BASS control	:	OFF



Procedure:

1. Put the set into the FWD PB mode.
2. Adjust RV231 (L-CH) and RV131 (R-CH) so that the level meter reading is –6±0.5 dB (0.37 to 0.41 V).

Adjustment Location: See page 22.

TUNER SECTION

(XR-C450: E, Saudi Arabia model only)

0dB=1µV

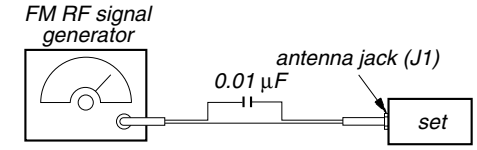
Cautions during repair

When the tuner unit is defective, replace it by a new one because its internal block is difficult to repair.

FM Auto Scan/Stop Level Adjustment

Setting:

SOURCE button : FM
FREQUENCY SELECT switch : 10 k

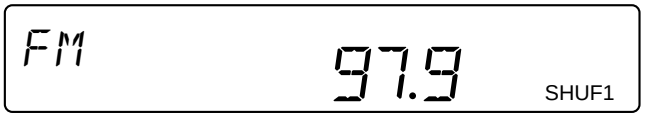


Carrier frequency : 97.9 MHz
Output level : 22 dB (12.6 µV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation

Procedure:

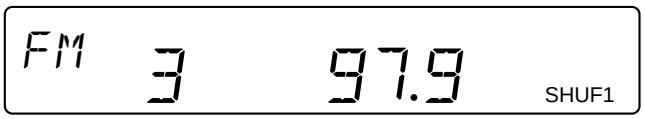
1. Set to the test mode. (See page 19).
2. Push the SOURCE button and set to FM.

Display



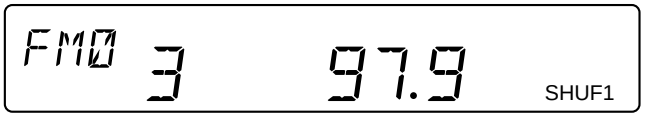
3. Push the preset 3 button.

Display



4. Adjust with the volume RV2 on TU1 so that the "FM" indication turns to "FM0" indication on the display window.
   But, in case of already indicated "FM0", turn the RV2 so that put out light "0" indication and adjustment.

Display

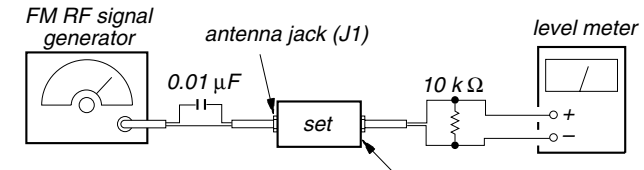


Adjustment Location: See page 22.

FM Noise Focus Adjustment

Setting:

SOURCE button : FM
FREQUENCY SELECT switch : 10 k



Carrier frequency : 97.9 MHz
Output level : 60 dB (1 mV)
Mode : mono
Modulation : 1 kHz, 75 kHz deviation

Procedure :

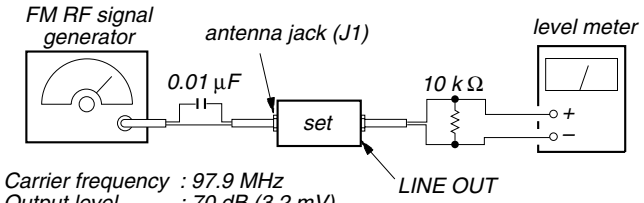
1. Tune the 97.9 MHz
2. The then output level is supposing that (A) dB.
3. Adjust with the volume RV3 on TU1 so that the output level is (A) –32 dB then signal generator input set to –20 dB.

Adjustment Location: See page 22.

FM Stereo Separation Adjustment

Setting:

SOURCE button : FM
FREQUENCY SELECT switch : 10 k



Carrier frequency : 97.9 MHz
Output level : 70 dB (3.2 mV)
Mode : stereo
Modulation : main: 1 kHz, 20 kHz deviation (26%)
sub: 1 kHz, 20 kHz deviation (26%)
19 kHz pilot: 7.5 kHz deviation (10%)

FM Stereo signal generator output channel	Level meter connection	Level meter reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV4 on TU1 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV4 on TU1 for minimum reading.

Procedure:

L-CH Stereo separation: Ⓐ-Ⓑ
R-CH Stereo separation: Ⓒ-Ⓓ
The separations of both channels should be equal.

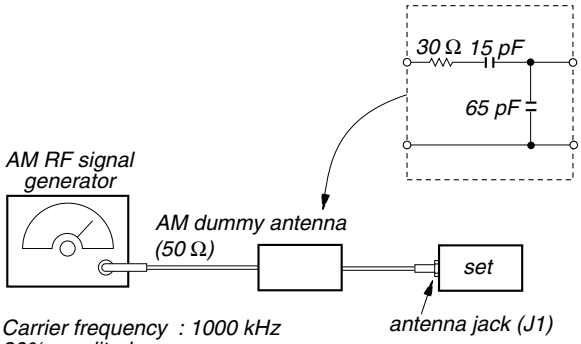
Specification: Separation more than 30 dB

Adjustment Location: See page 22.

AM (MW) Auto Scan/Stop Level Adjustment

Setting:

SOURCE and MODE button : MW
FREQUENCY SELECT switch : 10 k



Carrier frequency : 1000 kHz
30% amplitude modulation by 400 Hz signal
Output level : 33 dB (44.7 µV)

Procedure:

1. Set to the test mode. (See page 19.)
2. Push the SOURCE button and set to FM.
3. Push the MODE button and set to MW.

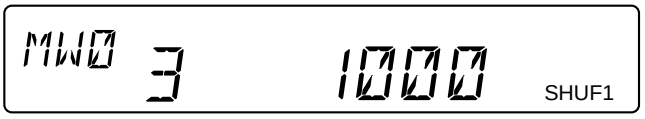
Display

4. Push the preset 3 button.

Display

5. Adjust with the volume RV1 on TU1 so that the "MW" indication turns to "MW0" indication on the display window.
   But, in case of already indicated "MW0", turn the RV1 so that put out light "0" indication and adjustment.

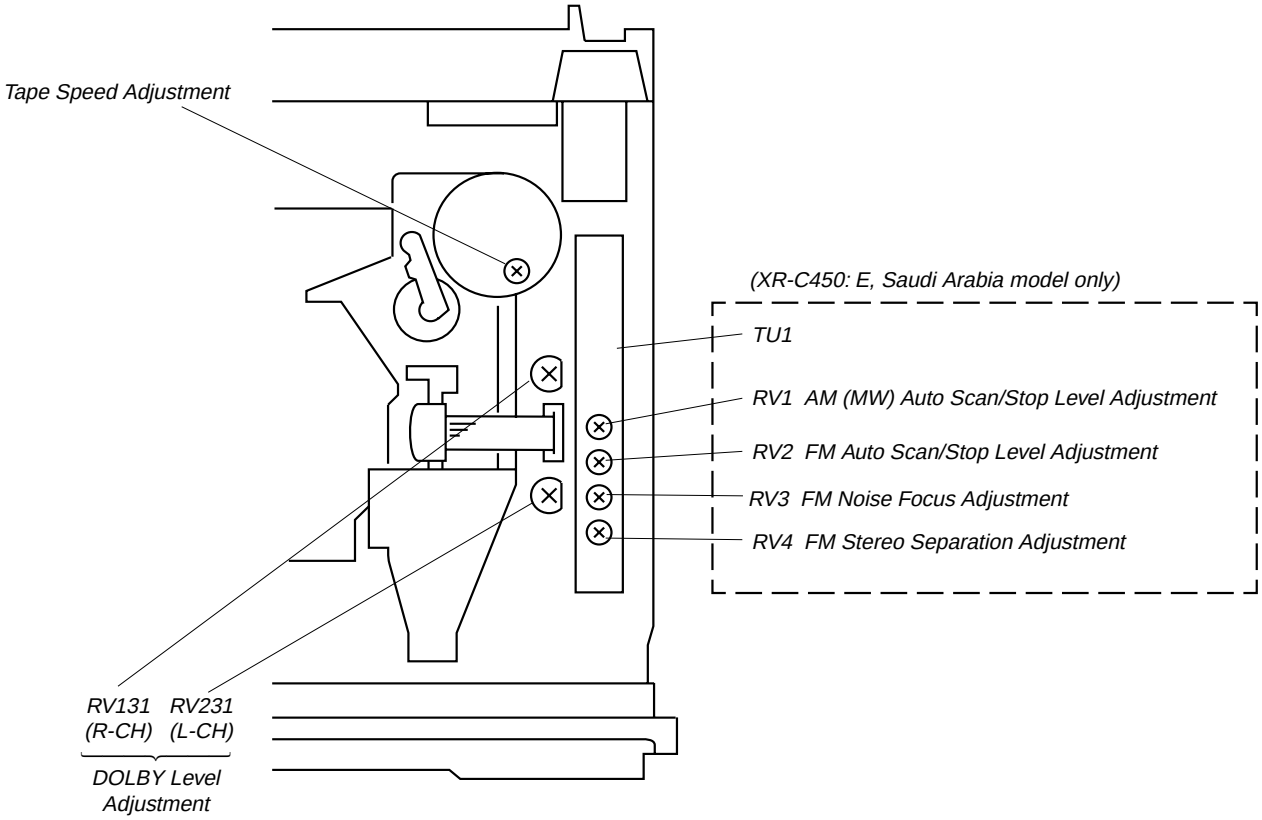
Display



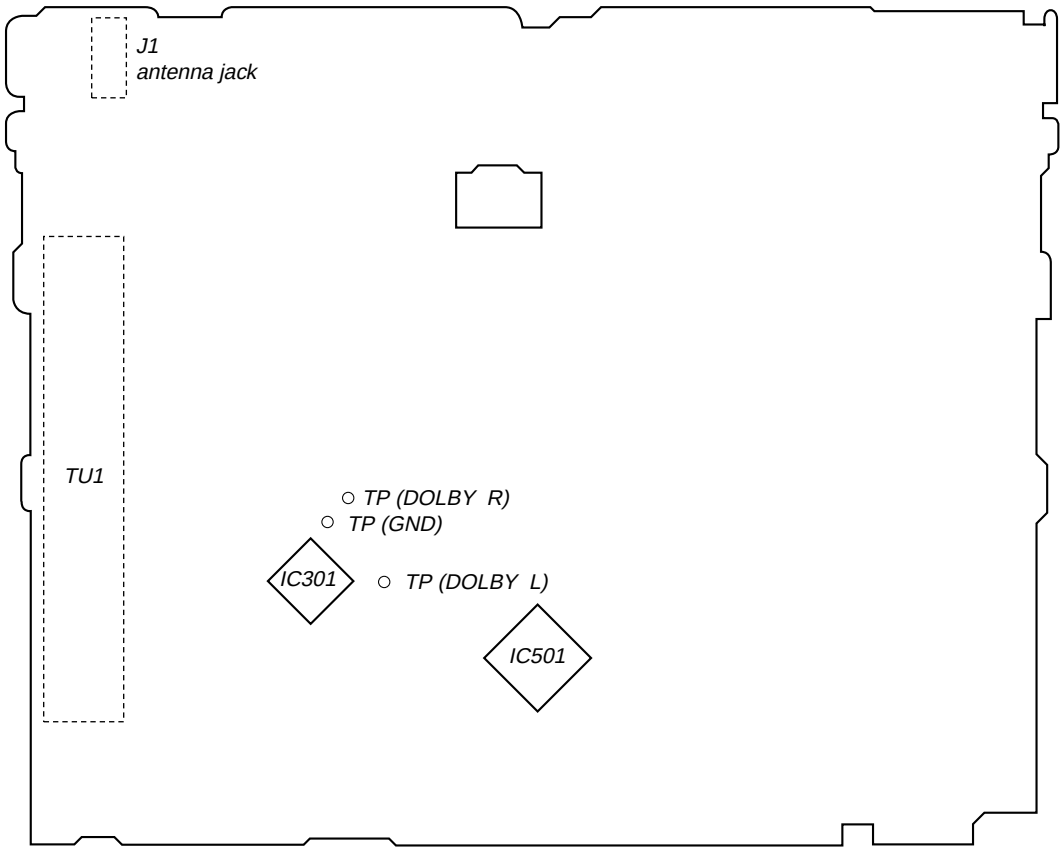
Adjustment Location: See page 22.

Adjustment Location:

– SET UPPER VIEW –


Tape Speed Adjustment
(XR-C450: E, Saudi Arabia model only)
TU1
RV1 AM (MW) Auto Scan/Stop Level Adjustment
RV2 FM Auto Scan/Stop Level Adjustment
RV3 FM Noise Focus Adjustment
RV4 FM Stereo Separation Adjustment
RV131 (R-CH)
RV231 (L-CH)
DOLBY Level Adjustment

– MAIN BOARD (CONDUCTOR SIDE) **–**

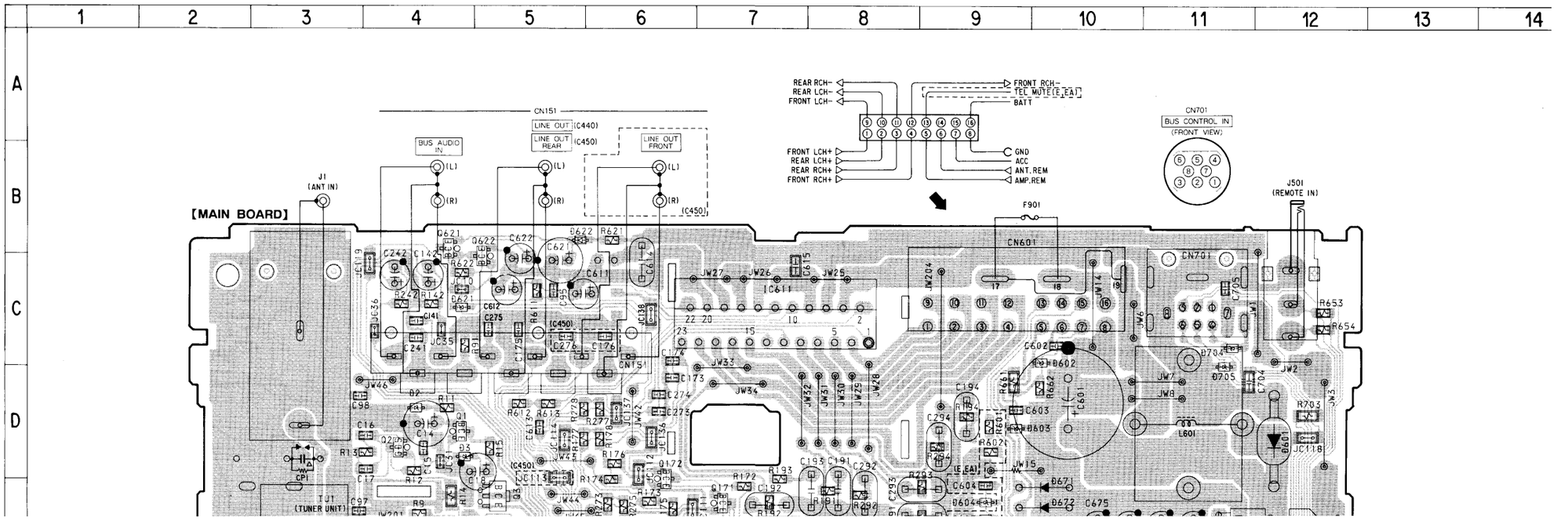


SECTION 6
DIAGRAMS

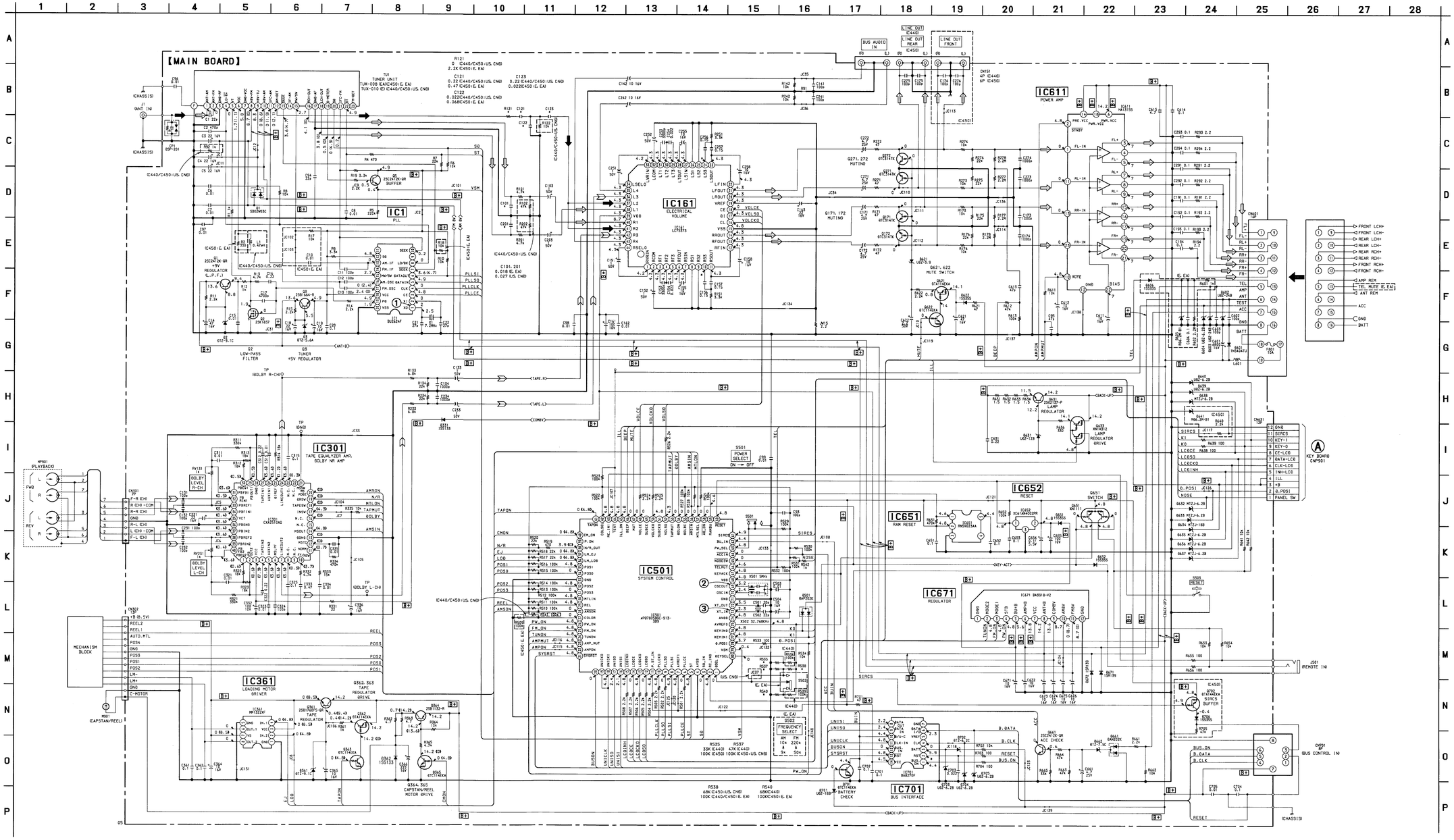
6-1. PRINTED WIRING BOARD – MAIN Section –

• **Semiconductor Location**

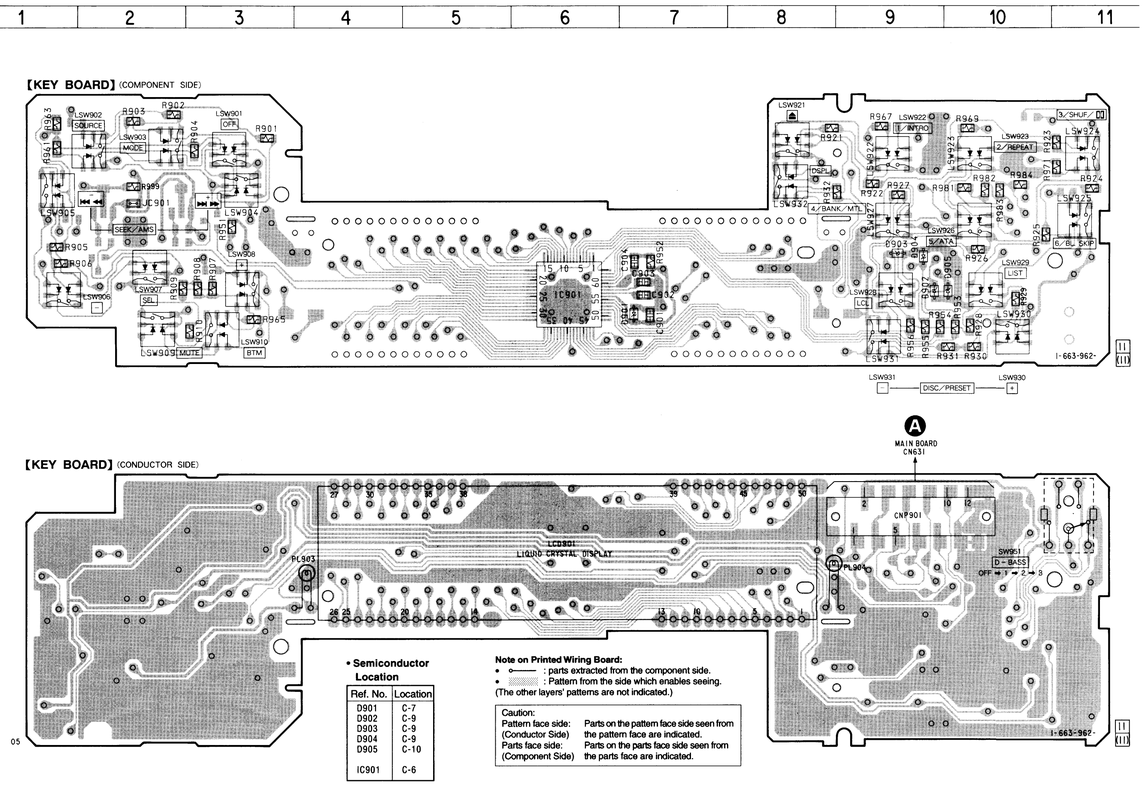
Ref. No.	Location	Ref. No.	Location
D1	F-3	IC1	E-4
D2	D-4	IC161	G-7
D3	D-4	IC301	H-5
D331	F-6	IC361	G-11
D361	H-11	IC501	I-7
D362	I-11	IC611	C-7
D501	I-5	IC651	I-10
D601	D-12	IC652	J-10
D602	D-10	IC671	F-11
D603	D-9	IC701	F-10
D604	E-9		
D605	E-9	Q1	D-4
D606	F-9	Q2	D-4
D621	C-4	Q3	E-5
D622	B-5	Q5	I-3
D631	I-11	Q171	E-7
D632	J-4	Q172	E-6
D633	J-4	Q271	E-6
D634	J-4	Q272	E-6
D635	J-4	Q361	H-11
D636	J-3	Q362	H-10
D637	J-3	Q363	I-10
D638	J-3	Q364	I-11
D639	J-3	Q365	H-10
D640	J-3	Q621	B-4



6-2. SCHEMATIC DIAGRAM – MAIN Section – • See page 37 for IC Block Diagrams.


【MAIN BOARD】
IC1 PLL
IC161 ELECTRICAL VOLUME
IC611 POWER AMP
IC301 TAPE EQUALYZER AMP, BOLBY NR AMP
IC501 SYSTEM CONTROL
IC361 LOADING MOTOR DRIVER
IC651 RAM RESET
IC652 RESET
IC671 REGULATOR
IC701 BUS INTERFACE
IC401 KEY BOARD
IC451 SIRCS BUFFER
Q2 LOW-PASS FILTER
Q8 TUNER +5V REGULATOR
Q562, 563 TAPE REGULATOR DRIVE
Q564, 565 CAPSTAN/REEL MOTOR DRIVE
Q621, 622 MUTE SWITCH
Q651 LAMP REGULATOR DRIVE
Q671 BATTERY CHECK
Q701 ACC CHECK
Q651 SWITCH
S501 POWER SELECT
S502 FREQUENCY SELECT
S503 RESET
TU1 TUNER UNIT
TUK-D08 IEA/C450/E, EA)
TUK-D10 ID IC440/C450/US CND
CN151 4P IC440I 4P IC450I
CN501 20P
CN502 7P
CN601 12P
CN651 12P
CN701 8P
CN901 16P
J1 ANT IN
J501 REMOTE IN
LINE OUT IC440I
LINE OUT REAR IC450I
LINE OUT FRONT IC450I
BUS AUDIO IN
HP501 (PLAYBACK)
MECHANISM BLOCK
M501 (CAPSTAN/REEL)
M502 (C-MOTOR)
KEY BOARD CNP901
BUS CONTROL IN
FRONT LCH+
FRONT LCH-
REAR LCH-
REAR RCH+
REAR RCH-
FRONT RCH+
FRONT RCH-
AMP. REM
TEL MUTE (E, EA)
ANT REM
ACC
GND
BATT
IC440/C450/US CND
IC440/C450/E, EA
IC450/E, EA
IC450/C, EA
IC440/E, EA
IC440/C450/E, EA
IC440/C450/US CND
IC440/C450/US CND
IC440/C450/US CND

6-3. PRINTED WIRING BOARD – KEY Section – (XR-C440)



• Semiconductor Location

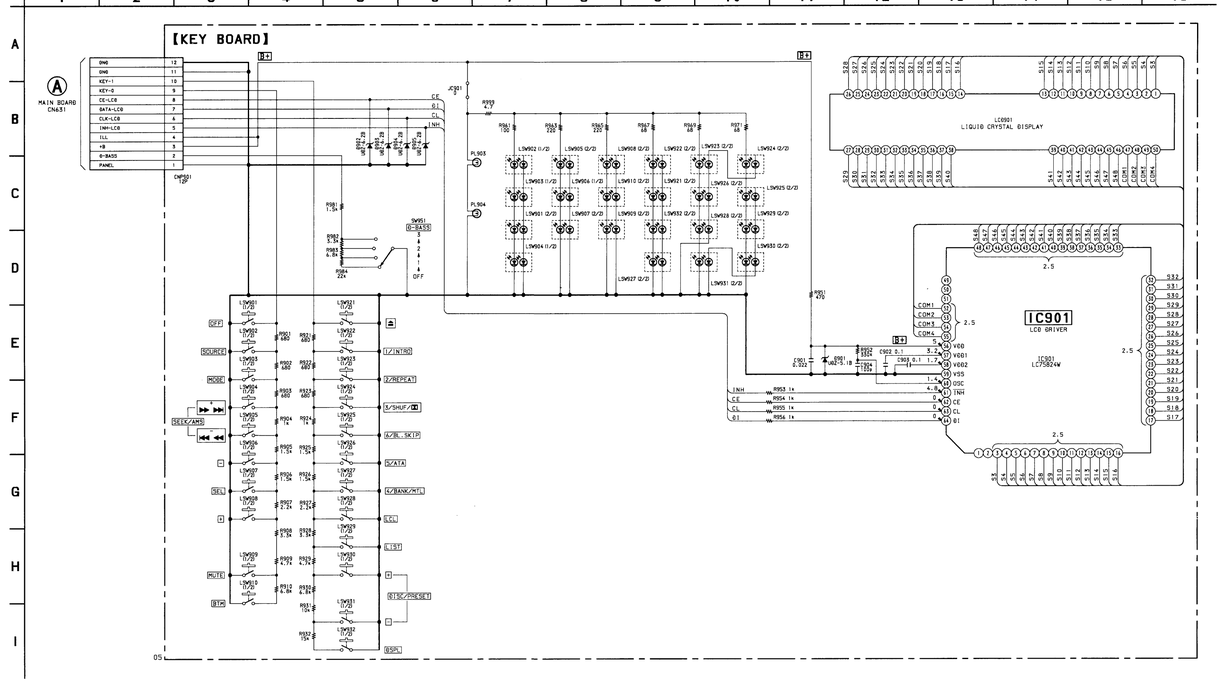
Ref. No.	Location
D901	C-7
D902	C-9
D903	C-9
D904	C-9
D905	C-10
IC901	C-6

Note on Printed Wiring Board:
- ○—— : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

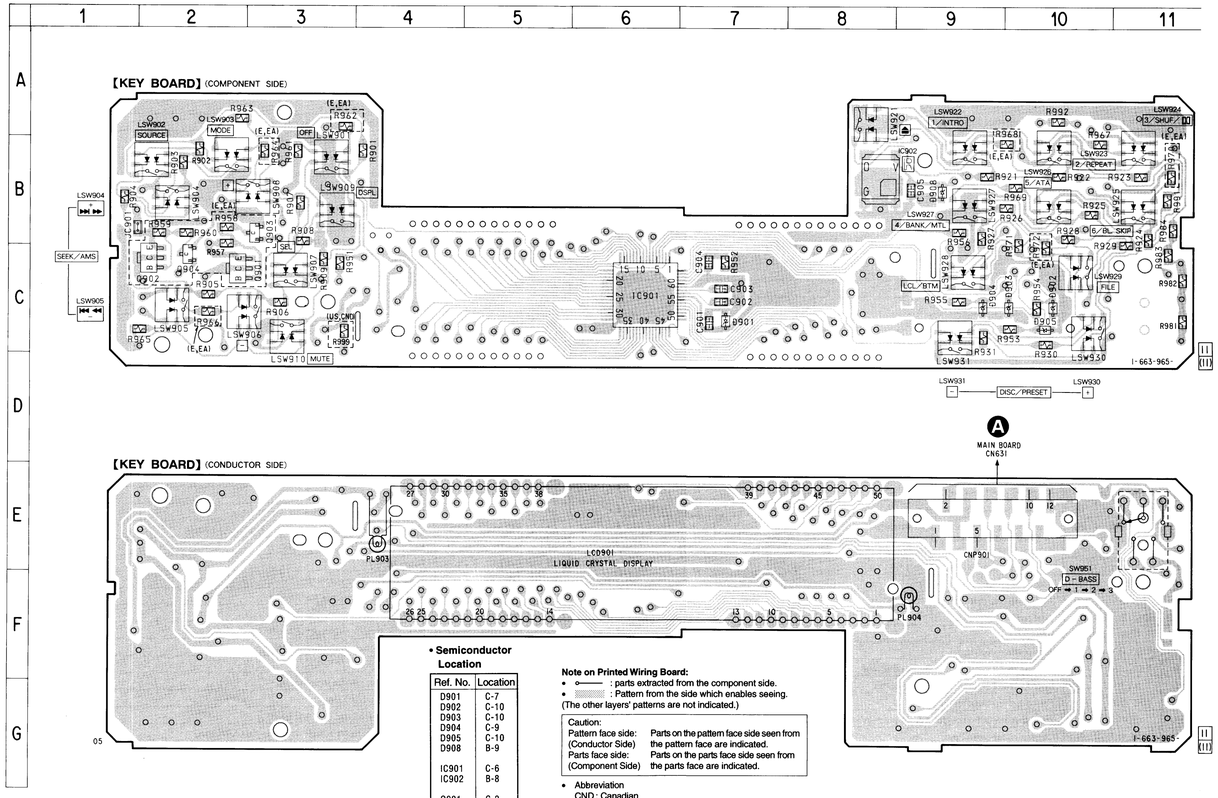
Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

6-4. SCHEMATIC DIAGRAM – KEY Section – (XR-C440)



Note on Schematic Diagram:
- All capacitors are in μF unless otherwise noted. pF: μμF
  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line.
- : panel designation.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from ACC and BATT terminals.
- Voltages are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.

6-5. PRINTED WIRING BOARD – KEY Section – (XR-C450)



• Semiconductor Location

Ref. No.	Location
D901	C-7
D902	C-10
D903	C-10
D904	C-9
D905	C-10
D908	B-9
IC901	C-6
IC902	B-8
Q901	C-2
Q902	C-2
Q903	B-3
Q904	C-2

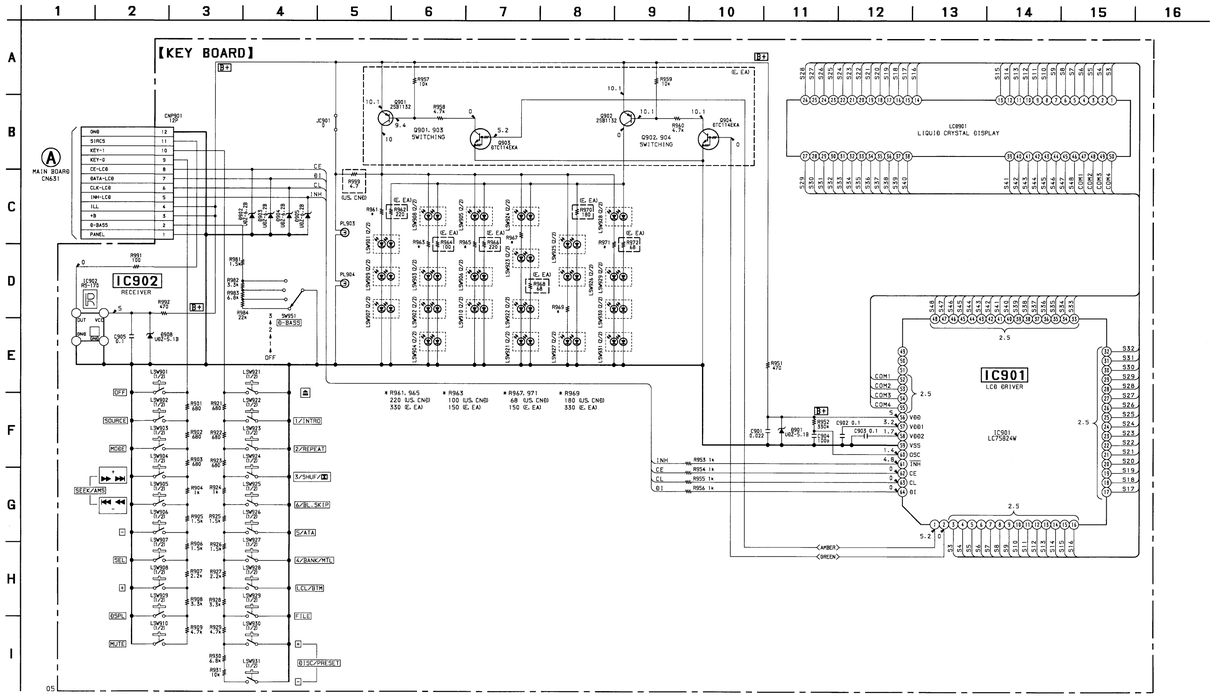
Note on Printed Wiring Board:
- ○ : parts extracted from the component side.
- ▨ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

- Abbreviation
  CND : Canadian
  EA : Saudi Arabia

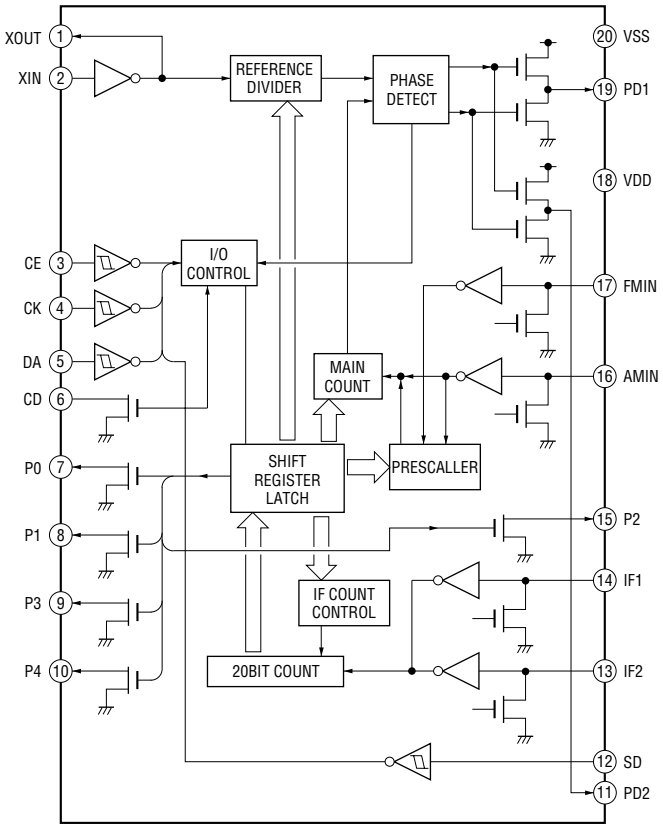
6-6. SCHEMATIC DIAGRAM – KEY Section – (XR-C450)



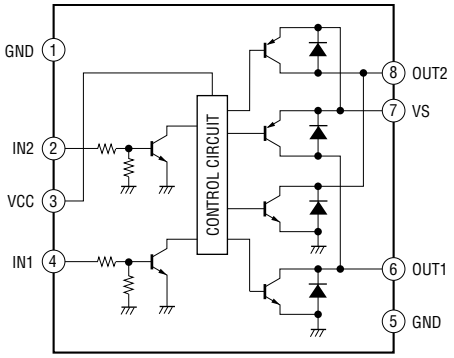
Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. pF: µF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line.
- ▭ : panel designation.
- Power voltage is dc 14.4 V and fed with regulated dc power supply from ACC and BATT terminals.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Abbreviation
  CND : Canadian
  EA : Saudi Arabia

• **IC Block Diagrams**

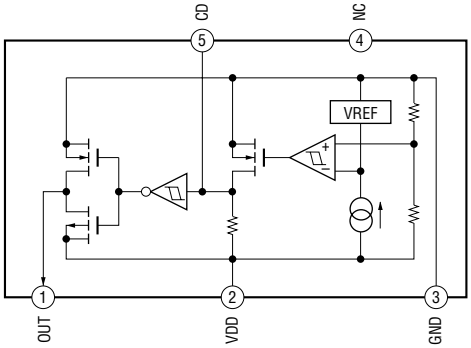
IC1 BU2624F-E2



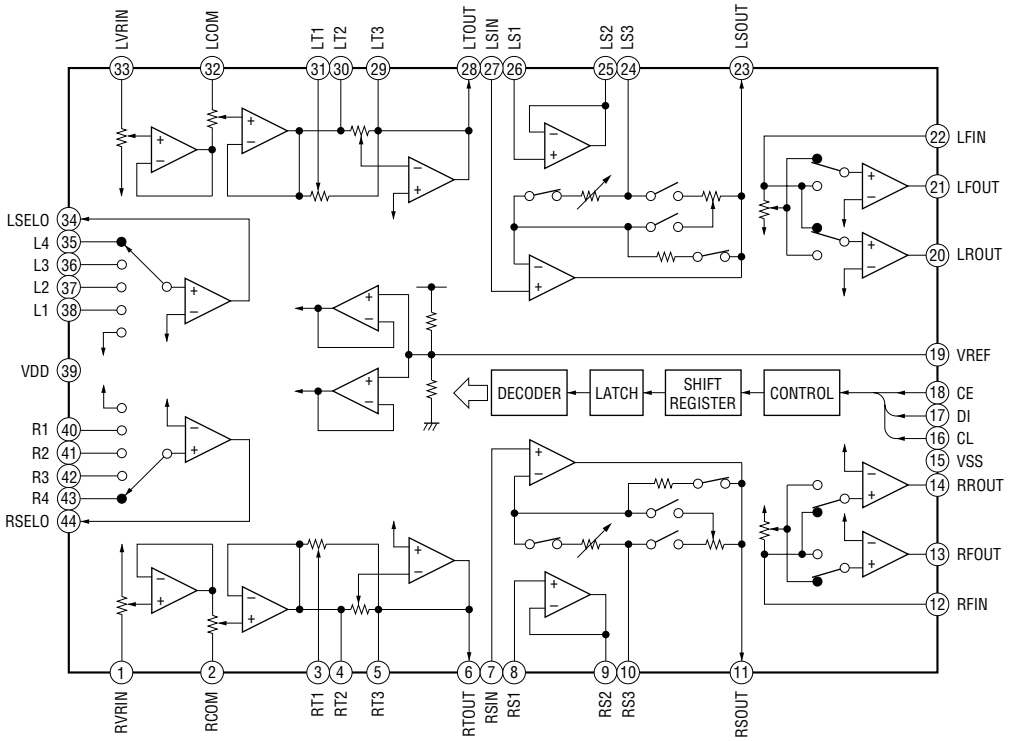
IC361 MM1322XFBE



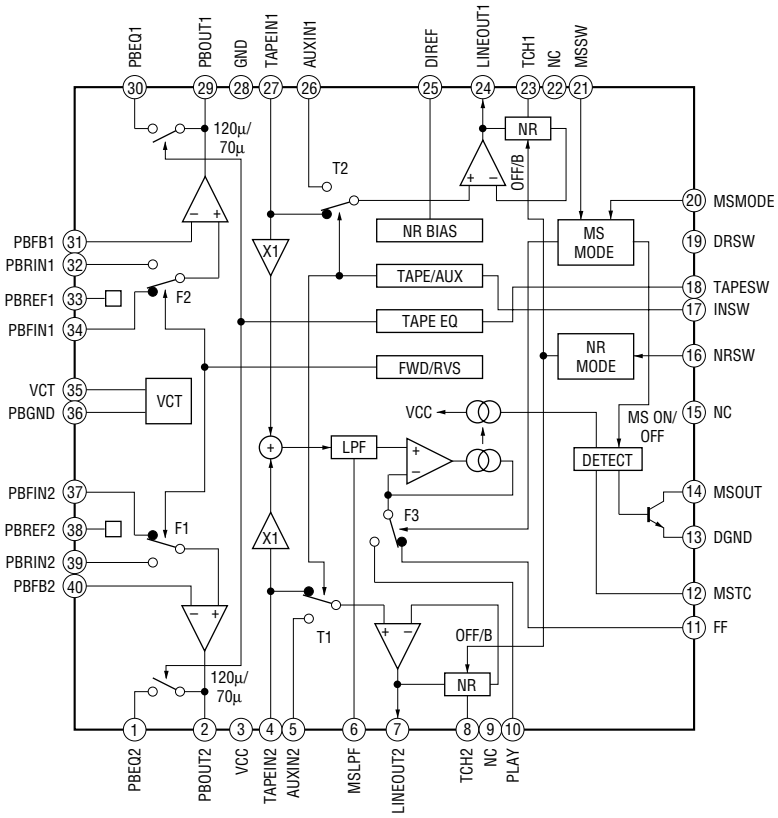
IC651 RN5VD23AA-TL



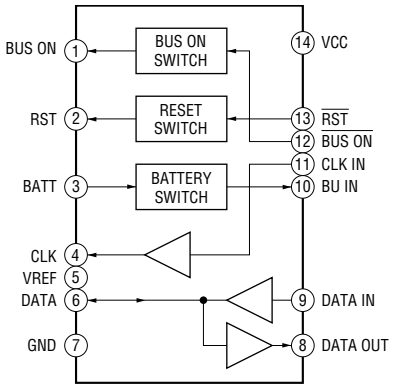
IC161 LC75373ED



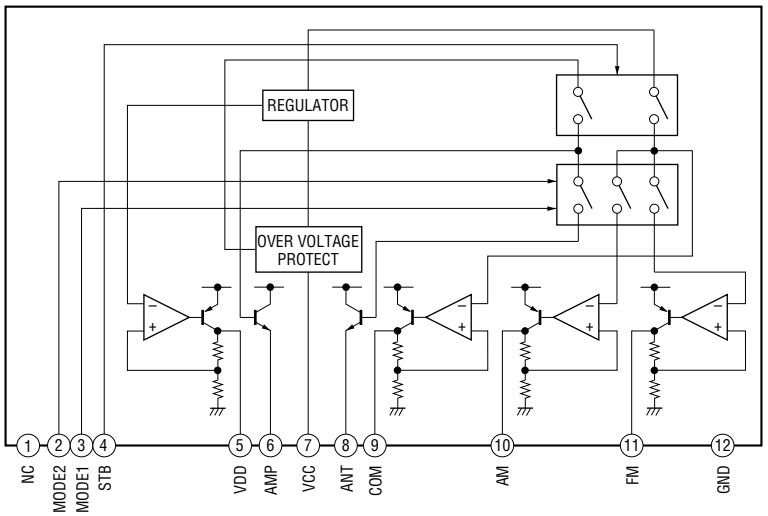
IC301 CXA2510AQ-T4



IC701 BA8270F-E2



IC671 BA3918-V2



6-7. IC PIN FUNCTION DESCRIPTION

MAIN BOARD IC501 µPD78058GC-913-3B9 (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Function
1	DSEL	I	Destination setting pin
2	RC_IN0	I	Rotary remote commander input pin (A/D input)
3	SD_IN	I	Station detection signal input
4	AVSS	—	GND
5	ST	I/O	Stereo detection signal input and forced monaural signal output pin
6	PLLCE	O	PLL chip enable output pin
7	AVREF1	I	A/D reference voltage input pin
8	PLLSI	I	PLL data input pin
9	PLLSO	O	PLL data output pin
10	PLLCKO	O	PLL clock output pin
11	P.ST_IN	I	Polar stereo input pin
12	LCDSO	O	LCD data output pin
13	LCDCKO	O	LCD clock output pin
14	LCDCE	O	LCD chip enable output pin
15	$\overline{\text{LCDINH}}$	O	LCD blank indication control pin
16	UNISI	I	Data input pin (for SONY BUS)
17	UNISO	O	Data output pin (for SONY BUS)
18	UNICKI	I	Clock input pin (for SONY BUS)
19	UNICKO	O	Clock output pin (for SONY BUS)
20	$\overline{\text{BUSON}}$	O	BUS ON control signal output pin (for SONY BUS)
21	$\overline{\text{SYSRST}}$	O	System reset signal output pin
22	AMPON	O	Power amp power supply control pin
23	AMP_MUT	O	Power amp muting control pin. At muting: “L”
24	TUNON	O	Tape power supply control pin
25	FM_ON	O	FM power supply control pin
26	PW_ON	O	System power supply control pin
27	COLOR	I/O	Illumination color selection input/output pin At initial mode: valid/invalid selection input of color select function At normal mode: color selection output
28	$\overline{\text{AMSON}}$	I	Tape AMS control pin. At AMS: “L”
29	REL	I	Reel table rotation detection pin
30	MTLIN	I	AUTO METAL detection pin. “L”: METAL
31, 32	POS3, POS2	I	Tape position control pin
33	GND	—	GND
34, 35	POS0, POS1	I	Tape position control pin
36	LM_LOD	O	Loading motor control pin (loading direction)
37	LM_EJ	O	Loading motor control pin (eject direction)
38	N/R_OUT	O	Forward/reverse control pin
39	P.ON	O	Polar stereo detection output pin. At polar stereo on: “H”
40	CM_ON	O	Capstan motor control pin
41	TAPON	O	Tape power supply control pin
42	COLSEL	I	Illumination color setting pin. “L”: amber, “H”: green
43	RC_IN1	I	Rotary remote commander input pin (A/D input)
44	$\overline{\text{TEST}}$	I	Test mode setting pin

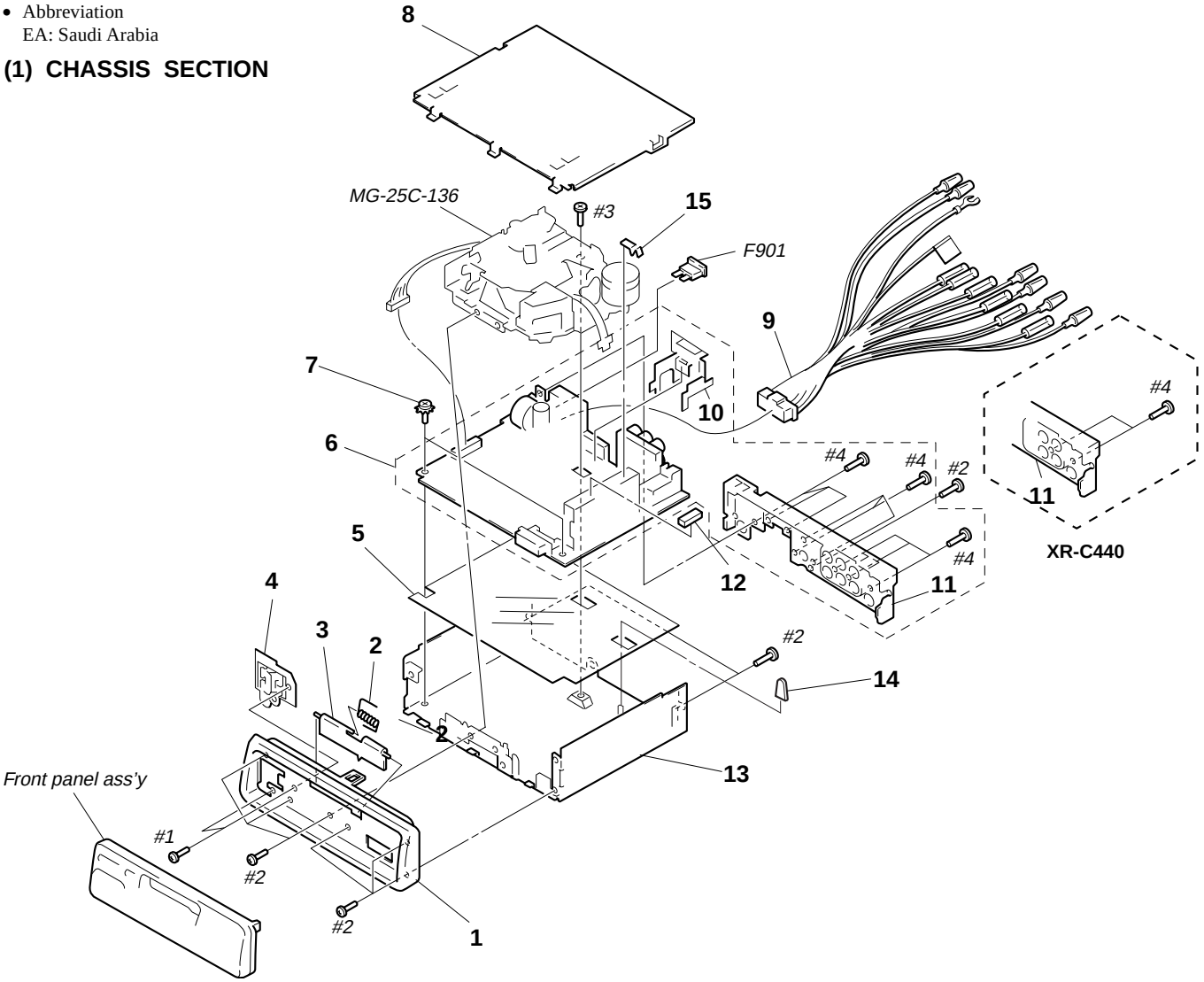
Pin No.	Pin Name	I/O	Function
45	ILLON	O	Illumination power supply control pin At PW SEL on: ACC on: “H” At PW SEL off: Power on: “H”
46	BEEP	O	Beep sound output pin
47	MUT	O	System mutig control pin. At muting: “H”
48	VOLCE	O	Chip enable output pin to electrical volume
49	SUBCE	O	Chip enable output pin to sub volume (not used)
50	VOLCKO	O	Clock output pin to electrical volume
51	SUBCKO	O	Clock output pin to sub volume (not used)
52	VOLSO	O	Data output pin to electrical volume
53	TAPMUT	O	Tape mutig control pin. At muting: “H”
54	DOLON	I/O	DOLBY control input/output pin At initial mode: valid/invalid selection input of DOLBY function At normal mode: DOLBY on/off output
55	DOLBC	I/O	DOLBY B/C selection pin At initial mode: valid/invalid selection input of DOLBY C function At normal mode: DOLBY B/C selection output. “L”: DOLBY B, “H”: DOLBY C
56	$\overline{\text{AMSIN}}$	I	Tape music with/without detection pin. “L”: with music
57	MTLSEL	I/O	METAL control input/output pin At initial mode: auto/manual serection input of METAL function. “L”: manual At manual mode: METAL on/off output. “H”: on At auto mode: input st 30 MTLIN
58	$\overline{\text{AD\_ON}}$	O	Power supply control pin for A/D conversion
59	RAMBU	I	Reset detection pin of RAM
60	$\overline{\text{RESET}}$	I	Reset input pin
61	SIRCS	I	SIRCS signal input pin
62	BU_IN	I	Buck up power supply detection pin
63	PW_SEL	I	Power select switch input pin
64	$\overline{\text{ACCIN}}$	I	Accessory voltage detection pin
65	$\overline{\text{NOSESW}}$	I	Front panel removal or attaching detection pin
66	$\overline{\text{TELMUT}}$	I	Telephone muting detection pin. “L”: 20dB audio muting
67	KEYACK	O	Key acknowledge signal input pin
68	VDD	—	Power supply
69	OSCOUT	O	Main system clock output pin (5MHz)
70	OSCIN	I	Main system clock input pin (5MHz)
71	GND	—	GND
72	XT_OUT	O	Sub system clock output pin (32.768kHz)
73	XT_IN	I	Sub system clock input pin (32.768kHz)
74	AVDD	—	Power supply
75	AVREF0	I	A/D reference voltage input pin
76, 77	KEYIN0, KEYIN1	I	Key input pin (A/D input)
78	D.POSI	I	D-BASS switch input pin (A/D input)
79	VSM	I	FM/AM signal meter voltage detection pin (A/D input)
80	KEYSEL	I	Key function setting pin

SECTION 7
EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  EA: Saudi Arabia
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.

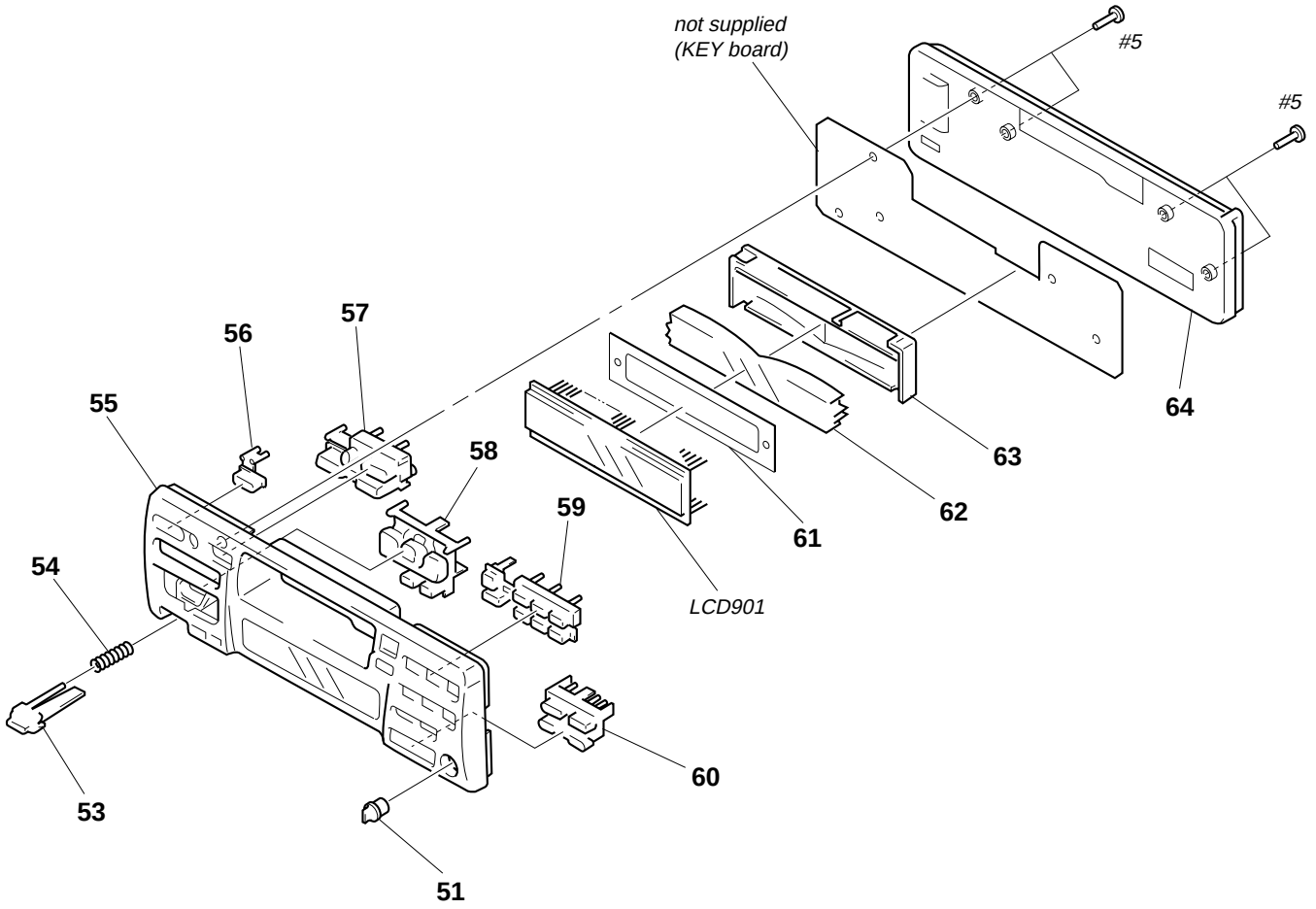
(1) CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
1	3-009-294-01	PANEL, SUB	
2	3-935-003-01	SPRING, TORSION	
3	3-932-205-31	DOOR, CASSETTE (XR-C450: E, EA)	
3	3-932-205-51	DOOR, CASSETTE (XR-C440/XR-C450: US, Canadian)	
4	X-3367-636-1	LOCK ASSY	
* 5	3-009-306-01	SHEET, INSULATING	
* 6	A-3309-720-A	MAIN BOARD, COMPLETE (XR-C450: US, Canadian)	
* 6	A-3309-723-A	MAIN BOARD, COMPLETE (XR-C450: E)	
* 6	A-3313-122-A	MAIN BOARD, COMPLETE (XR-C450: EA)	
* 6	A-3309-877-A	MAIN BOARD, COMPLETE (XR-C440)	
7	3-915-923-01	SCREW, GROUND POINT	
* 8	X-3373-270-1	COVER ASSY (XR-C440)	
* 8	X-3373-269-1	COVER ASSY (ISO) (XR-C450)	

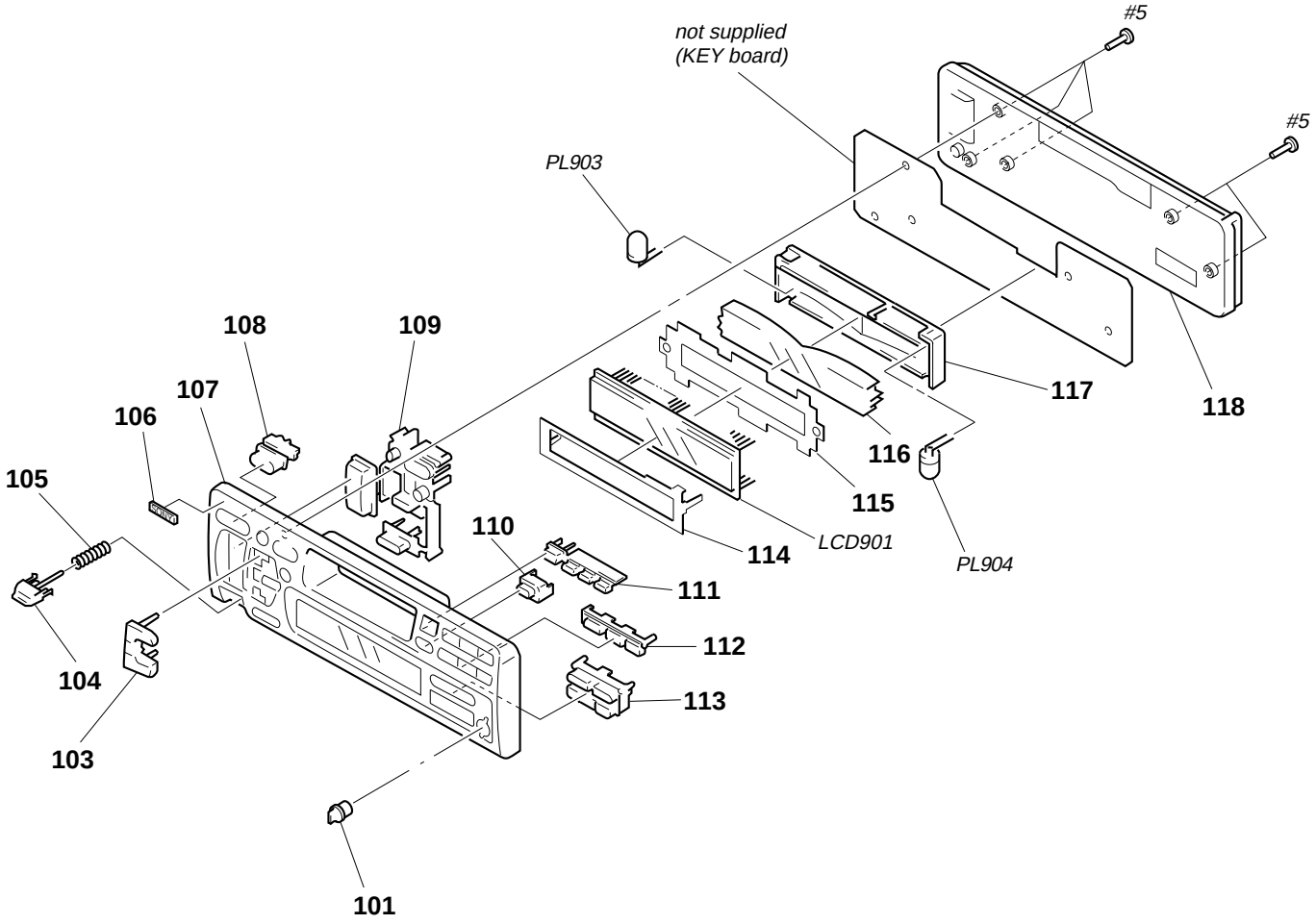
Ref. No.	Part No.	Description	Remark
9	1-776-207-11	CORD (WITH CONNECTOR) (XR-C440/XR-C450: E, EA)	
9	1-776-207-31	CORD (WITH CONNECTOR) (XR-C450: US, Canadian)	
* 10	3-009-809-01	BRACKET (IC)	
* 11	3-009-808-01	HEAT SINK (XR-C450)	
* 11	3-009-808-21	HEAT SINK (XR-C440)	
12	9-911-840-XX	CUSHION (U)	
* 13	3-009-813-01	CHASSIS	
* 14	3-012-859-01	CAP, RUBBER	
15	3-360-123-01	PLATE (C), GROUND (XR-C450: E, EA)	
15	3-937-650-01	PLATE (C), GROUND (XR-C440/XR-C450: US, Canadian)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	

(2) FRONT PANEL SECTION (XR-C440)



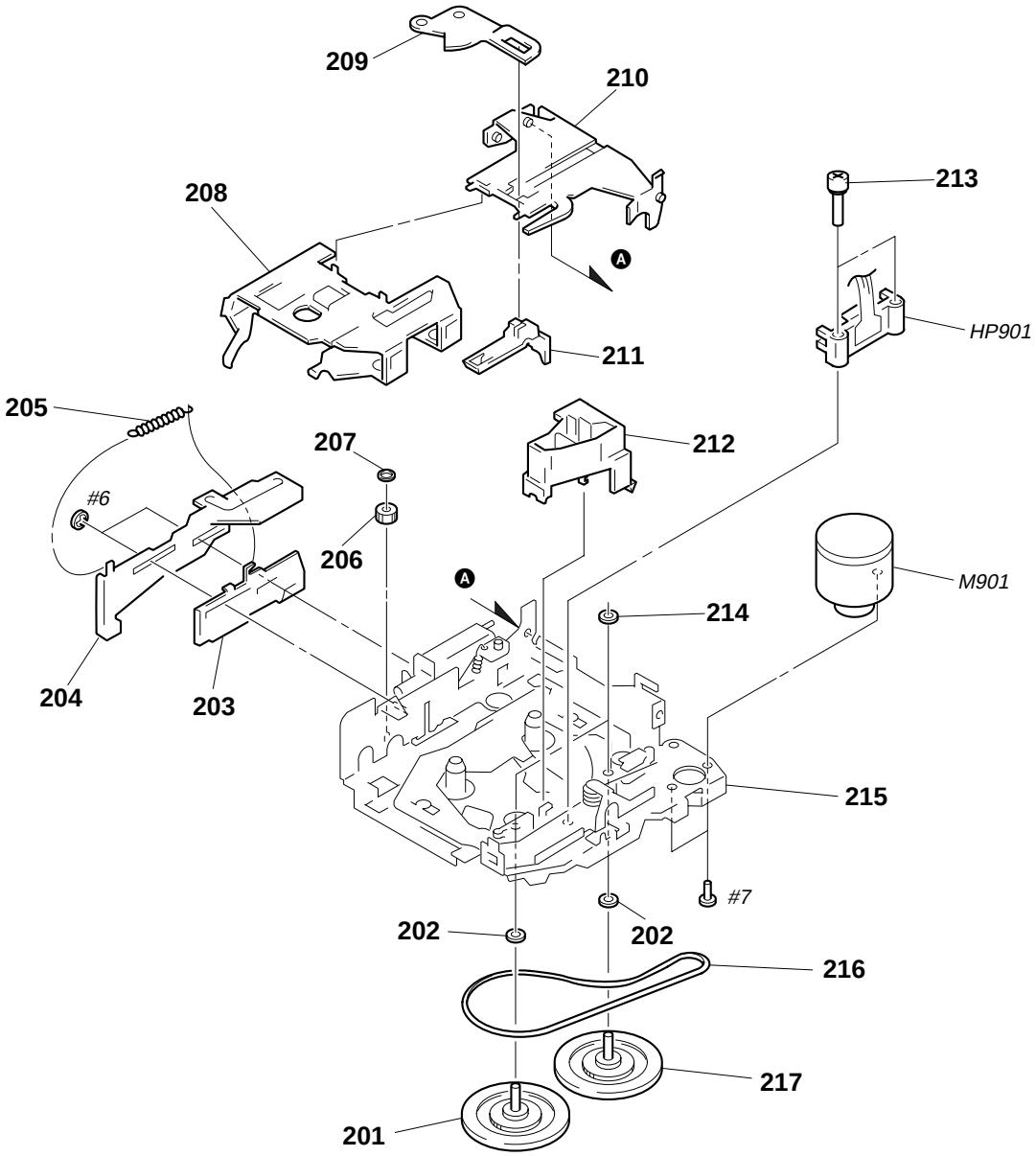
Ref. No.	Part No.	Description	Remark
51	3-010-396-01	KNOB (D-BASS)	
53	3-010-398-01	BUTTON (RELEASE)	
54	3-013-272-01	SPRING (RELEASE)	
55	X-3373-678-1	PANEL SUB ASSY	
56	3-010-383-01	BUTTON (SOURCE)	
57	3-010-384-01	BUTTON (M. O. S) (●. OFF. – ⏮ ◀◀. SEEK AMS. + ▶▶ ⏭)	
58	3-010-386-01	BUTTON (B.M.+/–) (–. SEL. +. MUTE. SENS)	
59	3-010-387-01	BUTTON (PRESET) (⏏. 1. 2. 3. 4. 5. 6. DSPL)	
60	3-010-390-01	BUTTON (L. L. D) (PTY. AF/ TA. – DISC +)	
* 61	3-010-375-11	SHEET (REFLECTOR) (XR-C440)	
* 62	3-010-393-01	PLATE (LCD), LIGHT GUIDE	
* 63	3-010-394-01	HOLDER (LCD)	
64	3-010-382-01	PANEL, FRONT BACK	
LCD901	1-801-587-11	DISPLAY PANEL, LIQUID CRYSTAL	

(3) FRONT PANEL SECTION (XR-C450)



Ref. No.	Part No.	Description	Remark
101	3-009-301-01	BUTTON (BASS)	
103	3-009-299-01	BUTTON (L2) (+.-)	
104	3-009-304-01	BUTTON (RELEASE)	
105	3-932-475-01	SPRING (RELEASE)	
106	3-904-194-01	EMBLEM (NO. 2.5), SONY	
107	X-3373-665-1	PANEL SUB ASSY	
108	3-009-300-01	BUTTON (SOURCE)	
109	3-009-297-01	BUTTON (L) (+ ▶▶I ▶▶. SEEK AMS. I◀◀ ◀◀ –.●. OFF. ●. SEL. MUTE)	
110	3-009-311-01	LENS	
111	3-009-308-01	BUTTON (1-3) (⏏. 1. 2. 3)	
112	3-009-309-11	BUTTON (4-6) (4. 5. 6)	
113	3-009-310-01	BUTTON (R) (L) (PTY. AF/ TA. – DISC +)	
* 114	3-010-282-01	PLATE (LCD), GROUND	
* 115	3-009-305-01	SHEET (REFLECTOR)	
* 116	3-009-302-11	PLATE (LCD), LIGHT GUIDE	
* 117	3-009-303-01	HOLDER (LCD)	
118	3-009-295-01	PANEL, FRONT BACK	
LCD901	1-801-587-11	DISPLAY PANEL, LIQUID CRYSTAL	
PL903	1-517-633-11	LAMP, PILOT	
PL904	1-517-633-11	LAMP, PILOT	

(4) MECHANISM DECK SECTION (MG-25C-136)



Ref. No.	Part No.	Description	Remark
201	A-3291-667-A	CLUTCH (FR) ASSY	
202	3-701-437-21	WASHER	
* 203	3-008-883-01	LEVER (LDG-A)	
* 204	3-008-884-01	LEVER (LDG-B)	
205	3-008-890-01	SPRING (LEVER LDG), TENSION	
206	3-933-335-01	GEAR (LDG-FT)	
207	3-341-753-11	WASHER, POLYETHYLENE	
208	3-008-861-01	HOUSING	
* 209	3-008-882-01	ARM (SUCTION)	
210	3-008-860-01	HANGER	

Ref. No.	Part No.	Description	Remark
211	3-008-874-02	CATCHER	
212	3-933-344-01	GUIDE (C)	
213	3-927-100-01	SCREW (+PS 2X10), SPECIAL	
214	3-364-151-01	WASHER	
215	A-3291-919-A	CHASSIS ASSY (A)	
216	3-928-675-01	BELT (52)	
217	3-936-853-01	FLYWHEEL (F)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/ REEL)	

SECTION 8
ELECTRICAL PARTS LIST

KEY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  EA: Saudi Arabia
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark
		KEY BOARD	
		*********	
*	3-009-302-01	PLATE (LCD), LIGHT GUIDE (XR-C450)	
*	3-009-303-01	HOLDER (LCD) (XR-C450)	
*	3-009-305-11	SHEET (REFLECTOR) (XR-C450)	
*	3-010-282-01	PLATE (LCD), GROUND (XR-C450)	
*	3-010-375-11	SHEET (REFLECTOR) (XR-C440)	
*	3-010-393-01	PLATE (LCD), LIGHT GUIDE (XR-C440)	
*	3-010-394-01	HOLDER (LCD) (XR-C440)	
		< CAPACITOR >	
C901	1-163-033-91	CERAMIC CHIP 0.022uF 50V	
C902	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C903	1-163-038-00	CERAMIC CHIP 0.1uF 25V	
C904	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C905	1-163-038-00	CERAMIC CHIP 0.1uF 25V	(XR-C450)
		< CONNECTOR >	
CNP901	1-764-423-11	PIN, CONNECTOR 12P	
		< DIODE >	
D901	8-719-976-99	DIODE DTZ5.1B	
D902	8-719-105-99	DIODE RD6.2M-B1	
D903	8-719-105-99	DIODE RD6.2M-B1	
D904	8-719-105-99	DIODE RD6.2M-B1	
D905	8-719-105-99	DIODE RD6.2M-B1	
D908	8-719-976-99	DIODE DTZ5.1B (XR-C450)	
		< IC >	
IC901	8-759-365-90	IC LC75824W	
IC902	8-749-012-25	IC RS-170-TU (XR-C450)	
		< CHIP CONDUCTOR >	
JC901	1-216-295-00	CONDUCTOR, CHIP (2012)	
		< LIQUID CRYSTAL DISPLAY >	
LCD901	1-801-587-11	DISPLAY PANEL, LIQUID CRYSTAL	
		< SWITCH >	
LSW901	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (OFF)	(XR-C440/XR-C450: US, Canadian)
LSW901	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (OFF)	(XR-C450:E, EA)
LSW902	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)	(XR-C440/XR-C450: US, Canadian)
LSW902	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SOURCE)	(XR-C450: E, EA)
LSW903	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MODE)	(XR-C440/XR-C450: US, Canadian)
LSW903	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (MODE)	(XR-C450: E, EA)
LSW904	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+ ▶▶I ▶▶ (SEEK/AMS))	(XR-C440/XR-C450: US, Canadian)
LSW904	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (+ ▶▶I ▶▶ (SEEK/AMS))	(XR-C450: E, EA)
LSW905	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (– I◀◀ ◀◀ (SEEK/AMS))	(XR-C440/XR-C450: US, Canadian)
LSW905	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (– I◀◀ ◀◀ (SEEK/AMS))	(XR-C450: E, EA)
LSW906	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (–)	(XR-C440/XR-C450: US, Canadian)
LSW906	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (–)	(XR-C450: E, EA)
LSW907	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (SEL)	(XR-C440/XR-C450: US, Canadian)
LSW907	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (SEL)	(XR-C450: E, EA)

KEY

Ref. No.	Part No.	Description	Remark
LSW908	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+)	(XR-C440/XR-C450: US, Canadian)
LSW908	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (+)	(XR-C450: E, EA)
LSW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MUTE)	(XR-C440)
LSW909	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DSPL)	(XR-C450: US, Canadian)
LSW909	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (DSPL)	(XR-C450: E, EA)
LSW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (BTM)	(XR-C440)
LSW910	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (MUTE)	(XR-C450: US, Canadian)
LSW910	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (MUTE)	(XR-C450: E, EA)
LSW921	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (⏏)	(XR-C440/XR-C450: US, Canadian)
LSW921	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (⏏)	(XR-C450: E, EA)
LSW922	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (1/INTRO)	(XR-C440/XR-C450: US, Canadian)
LSW922	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (1/INTRO)	(XR-C450: E, EA)
LSW923	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (2/REPEAT)	(XR-C440/XR-C450: US, Canadian)
LSW923	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (2/REPEAT)	(XR-C450: E, EA)
LSW924	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (3/SHUF/□□)	(XR-C440/XR-C450: US, Canadian)
LSW924	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (3/SHUF/□□)	(XR-C450: E, EA)
LSW925	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (6/BL.SKIP)	(XR-C440/XR-C450: US, Canadian)
LSW925	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (6/BL.SKIP)	(XR-C450: E, EA)
LSW926	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (5/ATA)	(XR-C440/XR-C450: US, Canadian)
LSW926	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (5/ATA)	(XR-C450:E, EA)
LSW927	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (4/BANK/MTL)	(XR-C440/XR-C450: US, Canadian)
LSW927	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (4/BANK/MTL)	(XR-C450: E, EA)
LSW928	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (LCL)	(XR-C440)
LSW928	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (LCL/BTM)	(XR-C450: US, Canadian)
LSW928	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (LCL/BTM)	(XR-C450: E, EA)
LSW929	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (LIST)	(XR-C440)
LSW929	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (FILE)	(XR-C450: US, Canadian)
LSW929	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (FILE)	(XR-C450: E, EA)
LSW930	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (+ (DISC/PRESET))	(XR-C440/XR-C450: US, Canadian)
LSW930	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (+ (DISC/PRESET))	(XR-C450: E, EA)
LSW931	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (– (DISC/PRESET))	(XR-C440/XR-C450: US, Canadian)
LSW931	1-762-620-11	SWITCH, KEY BOARD (WITH LED) (– (DISC/PRESET))	(XR-C450: E, EA)
LSW932	1-762-619-11	SWITCH, KEY BOARD (WITH LED) (DSPL)	(XR-C440)
		< PILOT LAMP >	
PL903	1-517-633-11	LAMP, PILOT	
PL904	1-517-633-11	LAMP, PILOT	
		< TRANSISTOR >	
Q901	8-729-106-60	TRANSISTOR 2SB1115A	(XR-C450: E, EA)
Q902	8-729-106-60	TRANSISTOR 2SB1115A	(XR-C450: E, EA)
Q903	8-729-900-53	TRANSISTOR DTC114EK	(XR-C450: E, EA)
Q904	8-729-900-53	TRANSISTOR DTC114EK	(XR-C450: E, EA)
		< RESISTOR >	
R901	1-216-045-00	METAL CHIP 680 5% 1/10W	
R902	1-216-045-00	METAL CHIP 680 5% 1/10W	
R903	1-216-045-00	METAL CHIP 680 5% 1/10W	
R904	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R905	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R906	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R907	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R908	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R909	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R910	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	(XR-C440)
R921	1-216-045-00	METAL CHIP 680 5% 1/10W	
R922	1-216-045-00	METAL CHIP 680 5% 1/10W	
R923	1-216-045-00	METAL CHIP 680 5% 1/10W	
R924	1-216-049-11	METAL GLAZE 1K 5% 1/10W	
R925	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R926	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
R927	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R928	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R929	1-216-065-00	METAL CHIP 4.7K 5% 1/10W	
R930	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
R931	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R932	1-216-077-00	METAL CHIP 15K 5% 1/10W	(XR-C440)

Ref. No.	Part No.	Description				Remark
R951	1-216-041-00	METAL CHIP	470	5%	1/10W	
R952	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R953	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R954	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R955	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R956	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R957	1-216-073-00	METAL CHIP	10K	5%	1/10W	(XR-C450: E, EA)
R958	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	(XR-C450: E, EA)
R959	1-216-073-00	METAL CHIP	10K	5%	1/10W	(XR-C450: E, EA)
R960	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	(XR-C450: E, EA)
R961	1-216-025-00	METAL GLAZE	100	5%	1/10W	(XR-C440)
R961	1-216-033-00	METAL CHIP	220	5%	1/10W	(XR-C450: US, Canadian)
R961	1-216-037-00	METAL CHIP	330	5%	1/10W	(XR-C450: E, EA)
R962	1-216-033-00	METAL CHIP	220	5%	1/10W	(XR-C450: E, EA)
R963	1-216-025-00	METAL GLAZE	100	5%	1/10W	(XR-C450: US, Canadian)
R963	1-216-029-00	METAL CHIP	150	5%	1/10W	(XR-C450: E, EA)
R963	1-216-033-00	METAL CHIP	220	5%	1/10W	(XR-C440)
R964	1-216-025-00	METAL GLAZE	100	5%	1/10W	(XR-C450: E, EA)
R965	1-216-033-00	METAL CHIP	220	5%	1/10W	(XR-C440/XR-C450: US, Canadian)
R965	1-216-037-00	METAL CHIP	330	5%	1/10W	(XR-C450: E, EA)
R966	1-216-033-00	METAL CHIP	220	5%	1/10W	(XR-C450: E, EA)
R967	1-216-021-00	METAL GLAZE	68	5%	1/10W	(XR-C440/XR-C450: US, Canadian)
R967	1-216-029-00	METAL CHIP	150	5%	1/10W	(XR-C450: E, EA)
R968	1-216-021-00	METAL GLAZE	68	5%	1/10W	(XR-C450: E, EA)
R969	1-216-021-00	METAL GLAZE	68	5%	1/10W	(XR-C440)
R969	1-216-031-00	METAL CHIP	180	5%	1/10W	(XR-C450: US, Canadian)
R969	1-216-037-00	METAL CHIP	330	5%	1/10W	(XR-C450: E, EA)
R970	1-216-031-00	METAL CHIP	180	5%	1/10W	(XR-C450:E, EA)
R971	1-216-021-00	METAL GLAZE	68	5%	1/10W	(XR-C440/XR-C450: US, Canadian)
R971	1-216-029-00	METAL CHIP	150	5%	1/10W	(XR-C450: E, EA)
R972	1-216-021-00	METAL GLAZE	68	5%	1/10W	(XR-C450: E, EA)
R981	1-216-053-00	METAL CHIP	1.5K	5%	1/10W	
R982	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R983	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R984	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R991	1-216-025-00	METAL GLAZE	100	5%	1/10W	(XR-C450)
R992	1-216-041-00	METAL CHIP	470	5%	1/10W	(XR-C450)
R999	1-216-308-00	METAL GLAZE	4.7	5%	1/10W	(XR-C440/XR-C450: US, Canadian)
		< SWITCH >				
SW951	1-762-937-11	SWITCH, ROTARY (D-BASS)				
**********						
*	A-3309-720-A	MAIN BOARD, COMPLETE				
		**********				(XR-C450: US, Canadian)
*	A-3309-723-A	MAIN BOARD, COMPLETE (XR-C450: E)				
		**********				
*	A-3309-877-A	MAIN BOARD, COMPLETE (XR-C440)				
		**********				
*	A-3313-122-A	MAIN BOARD, COMPLETE (XR-C450: EA)				
		**********				
*	3-009-808-01	HEAT SINK (XR-C450)				
*	3-009-808-21	HEAT SINK (XR-C440)				
*	3-009-809-01	BRACKET (IC)				
	7-685-794-09	SCREW +PTT 2.6X10 (S)				
		< CAPACITOR >				
C1	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C2	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C3	1-124-234-00	ELECT	22uF	20%	16V	
C4	1-124-234-00	ELECT	22uF	20%	16V	
C5	1-124-234-00	ELECT	22uF	20%	16V	
C6	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C7	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C8	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C10	1-164-232-11	CERAMIC CHIP	0.01uF		50V	(XR-C450: E, EA)
C11	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C12	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C13	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C14	1-124-589-11	ELECT	47uF	20%	16V	
C15	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C16	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C17	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	
C18	1-124-234-00	ELECT	22uF	20%	16V	

MAIN

Ref. No.	Part No.	Description				Remark
C19	1-126-157-11	ELECT	10uF	20%	16V	
C20	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C21	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C22	1-163-237-11	CERAMIC CHIP	27PF	5%	50V	
C93	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C94	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C95	1-163-243-11	CERAMIC CHIP	47PF	5%	50V	
C96	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C97	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C98	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C99	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C101	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V	
						(XR-C440/XR-C450: E, EA)
C101	1-163-986-00	CERAMIC CHIP	0.027uF	10%	25V	
						(XR-C450: US, Canadian)
C103	1-126-160-11	ELECT	1uF	20%	50V	
C121	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	
						(XR-C450: E, EA)
C121	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
						(XR-C440/XR-C450: US, Canadian)
C122	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
						(XR-C440/XR-C450: US, Canadian)
C122	1-164-344-11	CERAMIC CHIP	0.068uF	10%	25V	
						(XR-C450: E, EA)
C123	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
						(XR-C450: E, EA)
C123	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
						(XR-C440/XR-C450: US, Canadian)
C131	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C132	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C133	1-126-160-11	ELECT	1uF	20%	50V	
C134	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C141	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C142	1-126-157-11	ELECT	10uF	20%	16V	
C151	1-126-160-11	ELECT	1uF	20%	50V	
C152	1-126-160-11	ELECT	1uF	20%	50V	
C153	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C154	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C155	1-126-157-11	ELECT	10uF	20%	16V	
C156	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	
C157	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	
C158	1-126-157-11	ELECT	10uF	20%	16V	
C161	1-124-584-00	ELECT	100uF	20%	10V	
C162	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C163	1-124-234-00	ELECT	22uF	20%	16V	
C171	1-126-163-11	ELECT	4.7uF	20%	50V	
C172	1-126-163-11	ELECT	4.7uF	20%	50V	
C173	1-163-009-11	CERAMIC CHIP	1000PF	10%	50V	
C174	1-163-009-11	CERAMIC CHIP	1000PF	10%	50V	
C175	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C176	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
						(XR-C450)
C191	1-136-165-00	FILM	0.1uF	5%	50V	
C192	1-136-165-00	FILM	0.1uF	5%	50V	
C193	1-136-165-00	FILM	0.1uF	5%	50V	
C194	1-136-165-00	FILM	0.1uF	5%	50V	
C201	1-163-024-00	CERAMIC CHIP	0.018uF	10%	50V	
						(XR-C440/XR-C450: E, EA)
C201	1-163-986-00	CERAMIC CHIP	0.027uF	10%	25V	
						(XR-C450: US, Canadian)
C203	1-126-160-11	ELECT	1uF	20%	50V	
C231	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C232	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C233	1-126-160-11	ELECT	1uF	20%	50V	
C234	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	
C241	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C242	1-126-157-11	ELECT	10uF	20%	16V	
C251	1-126-160-11	ELECT	1uF	20%	50V	
C252	1-126-160-11	ELECT	1uF	20%	50V	
C253	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V	
C254	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C255	1-126-157-11	ELECT	10uF	20%	16V	
C256	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	
C257	1-164-492-11	CERAMIC CHIP	0.15uF	10%	16V	
C258	1-126-157-11	ELECT	10uF	20%	16V	
C271	1-126-163-11	ELECT	4.7uF	20%	50V	
C272	1-126-163-11	ELECT	4.7uF	20%	50V	
C273	1-163-009-11	CERAMIC CHIP	1000PF	10%	50V	
C274	1-163-009-11	CERAMIC CHIP	1000PF	10%	50V	
C275	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C276	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
						(XR-C450)
C291	1-136-165-00	FILM	0.1uF	5%	50V	
C292	1-136-165-00	FILM	0.1uF	5%	50V	
C293	1-136-165-00	FILM	0.1uF	5%	50V	
C294	1-136-165-00	FILM	0.1uF	5%	50V	
C311	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C312	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C313	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C315	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C321	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C322	1-164-489-11	CERAMIC CHIP	0.22uF	10%	16V	
C323	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C324	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C325	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C331	1-124-234-00	ELECT	22uF	20%	16V	
C332	1-124-584-00	ELECT	100uF	20%	10V	
C333	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	
C334	1-164-232-11	CERAMIC CHIP	0.01uF		50V	

Ref. No.	Part No.	Description				Remark
C335	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C336	1-126-157-11	ELECT	10uF	20%	16V	
C361	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C362	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C364	1-126-157-11	ELECT	10uF	20%	16V	
C365	1-126-157-11	ELECT	10uF	20%	16V	
C366	1-126-934-11	ELECT	220uF	20%	16V	
C501	1-163-234-11	CERAMIC CHIP	20PF	5%	50V	
C502	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	
C503	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
C504	1-126-157-11	ELECT	10uF	20%	16V	
C601	1-126-938-51	ELECT	6800uF	20%	16V	
C602	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C603	1-163-251-11	CERAMIC CHIP	100PF	5%	50V	
C604	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
						(XR-C440/XR-C450: E, EA)
C611	1-126-157-11	ELECT	10uF	20%	16V	
C612	1-126-157-11	ELECT	10uF	20%	16V	
C613	1-163-243-11	CERAMIC CHIP	47PF	5%	50V	
C614	1-136-165-00	FILM	0.1uF	5%	50V	
C615	1-164-506-11	CERAMIC CHIP	4.7uF		16V	
C621	1-124-589-11	ELECT	47uF	20%	16V	
C622	1-126-161-11	ELECT	2.2uF	20%	50V	
C631	1-164-222-11	CERAMIC CHIP	0.22uF		25V	
C651	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C652	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C653	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C654	1-125-710-11	CAPACITOR	0.1F		5.5V	
C655	1-124-584-00	ELECT	100uF	20%	10V	
C661	1-126-163-11	ELECT	4.7uF	20%	50V	
C671	1-126-157-11	ELECT	10uF	20%	16V	
C672	1-126-157-11	ELECT	10uF	20%	16V	
C673	1-126-157-11	ELECT	10uF	20%	16V	
C674	1-126-157-11	ELECT	10uF	20%	16V	
C675	1-126-157-11	ELECT	10uF	20%	16V	
C676	1-126-157-11	ELECT	10uF	20%	16V	
C701	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V	
C702	1-163-038-00	CERAMIC CHIP	0.1uF		25V	
C703	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V	
C704	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V	
C705	1-164-232-11	CERAMIC CHIP	0.01uF		50V	
		< CONNECTOR >				
CN151	1-774-699-12	JACK, PIN 4P (BUS AUDIO IN/LINE OUT)				
						(XR-C440)
CN151	1-774-700-11	JACK, PIN 6P (BUS AUDIO IN/LINE OUT)				
						(XR-C450)
CN301	1-766-260-11	CONNECTOR, FFC/FPC (ZIF) 7P				
* CN302	1-506-995-11	PIN, CONNECTOR (PC BOARD) 13P				
CN601	1-774-701-11	PIN, CONNECTOR 16P				
CN631	1-764-422-11	PLUG, CONNECTOR 12P				
CN701	1-580-907-31	PLUG, CONNECTOR (BUS CONTROL IN)				
		< CONPOSITION CIRCUIT BLOCK >				
CP1	1-519-504-11	GAP, DISCHARGE				
		< DIODE >				
D1	8-719-991-65	DIODE SB02W03C				
D2	8-719-977-25	DIODE DTZ9.1C				
D3	8-719-977-02	DIODE DTZ-TT11-5.6A				
D331	8-719-991-33	DIODE 1SS133T-77				
D361	8-719-977-25	DIODE DTZ9.1C				
D362	8-719-991-33	DIODE 1SS133T-77				
D501	8-719-914-44	DIODE DAP202K				
D601	8-719-049-38	DIODE 1N5404TU				
D602	8-719-977-69	DIODE DTZ24B				
D603	8-719-977-69	DIODE DTZ24B				
D604	8-719-105-99	DIODE RD6.2M-B1				
D605	8-719-105-99	DIODE RD6.2M-B1 (XR-C440/XR-C450: E, EA)				
D606	8-719-988-62	DIODE 1SS355 (XR-C440/XR-C450: E, EA)				
D621	8-719-976-88	DIODE DTZ3.9B				
D622	8-719-988-62	DIODE 1SS355				
D631	8-719-158-49	DIODE RD12SB2				
D632	8-719-109-93	DIODE RD6.2ESB2				
D633	8-719-109-93	DIODE RD6.2ESB2				
D634	8-719-110-49	DIODE RD18ES-B2				
D635	8-719-109-93	DIODE RD6.2ESB2				
D636	8-719-109-93	DIODE RD6.2ESB2				
D637	8-719-109-93	DIODE RD6.2ESB2				
D638	8-719-109-93	DIODE RD6.2ESB2				
D639	8-719-105-99	DIODE RD6.2M-B1				
D640	8-719-105-99	DIODE RD6.2M-B1				
D641	8-719-105-99	DIODE RD6.2M-B1 (XR-C450)				
D651	8-719-988-62	DIODE 1SS355				
D652	8-719-988-62	DIODE 1SS355				
D661	8-719-914-43	DIODE DAN202K				
D662	8-719-977-17	DIODE DTZ7.5C				
D671	8-719-970-02	DIODE 1SR139-400				
D672	8-719-970-02	DIODE 1SR139-400				
D701	8-719-056-93	DIODE UDZ-TE-17-18B				
D702	8-719-105-99	DIODE RD6.2M-B1				
D703	8-719-105-99	DIODE RD6.2M-B1				
D704	8-719-105-99	DIODE RD6.2M-B1				
D705	8-719-105-99	DIODE RD6.2M-B1				
D706	8-719-988-62	DIODE 1SS355 (XR-C450)				

MAIN

Ref. No.	Part No.	Description	Remark
		< IC >	
IC1	8-759-448-84	IC BU2624F-E2	
IC161	8-759-443-67	IC LC75373ED	
IC301	8-752-079-79	IC CXA2510AQ-T4	
IC361	8-759-395-97	IC MM1322XFBE	
IC501	8-759-461-73	IC uPD78058GC-913-3B9	
IC611	8-759-369-41	IC HA13155	
IC651	8-759-344-91	IC RN5VD23AA-TL	
IC652	8-759-363-81	IC XC61AN4002PR	
IC671	8-759-347-49	IC BA3918-V2	
IC701	8-759-449-89	IC BA8270F-E2	
		< JACK >	
J1	1-764-808-14	JACK (ANT) (ANT IN)	
J501	1-566-822-41	JACK (REMOTE IN)	
		< CHIP CONDUCTOR >	
JC1	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC2	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC5	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC6	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC7	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC8	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC9	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
JC10	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC11	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC12	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC31	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC33	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC34	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC35	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC36	1-216-295-00	CONDUCTOR, CHIP (2012)	
JC37	1-216-295-00	CONDUCTOR, CHIP (2012)	(XR-C450: US, Canadian)
JC101	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC102	1-216-296-00	CONDUCTOR, CHIP (3216)	(XR-C450: E, EA)
JC103	1-216-296-00	CONDUCTOR, CHIP (3216)	(XR-C450: E, EA)
JC104	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC105	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC106	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC107	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC108	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC110	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC111	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC112	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC113	1-216-296-00	CONDUCTOR, CHIP (3216)	(XR-C450)
JC114	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC115	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC116	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC117	1-216-296-00	CONDUCTOR, CHIP (3216)	(XR-C450)
JC118	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC119	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC120	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC121	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC122	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC123	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC124	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC125	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC126	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC131	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC132	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC133	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC134	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC136	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC137	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC138	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC139	1-216-296-00	CONDUCTOR, CHIP (3216)	
JC140	1-216-296-00	CONDUCTOR, CHIP (3216)	
		< COIL >	
L1	1-410-989-11	INDUCTOR CHIP 0.47uH	(XR-C440/XR-C450: US, Canadian)
L601	1-411-669-12	COIL, CHOKE	
		< TRANSISTOR >	
Q1	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q2	8-729-021-94	TRANSISTOR 2SK1657-T1B	
Q3	8-729-106-68	TRANSISTOR 2SD1615A-GP	
Q5	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q171	8-729-920-21	TRANSISTOR DTC314TKH04	
Q172	8-729-920-21	TRANSISTOR DTC314TKH04	
Q271	8-729-920-21	TRANSISTOR DTC314TKH04	
Q272	8-729-920-21	TRANSISTOR DTC314TKH04	
Q361	8-729-921-48	TRANSISTOR 2SD1760F5-TRPQR	
Q362	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q363	8-729-900-53	TRANSISTOR DTC114EK	
Q364	8-729-106-60	TRANSISTOR 2SB1115A	
Q365	8-729-900-53	TRANSISTOR DTC114EK	
Q621	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q622	8-729-900-53	TRANSISTOR DTC114EK	
Q631	8-729-423-99	TRANSISTOR 2SD2137-OP	
Q633	8-729-020-67	TRANSISTOR XN1A312-TX	
Q651	8-729-024-31	TRANSISTOR XN1111-TX	
Q661	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q701	8-729-900-53	TRANSISTOR DTC114EK	

Ref. No.	Part No.	Description				Remark
Q702	8-729-027-38	TRANSISTOR DTA144EKA-T146 (XR-C450)				
		< RESISTOR >				
JW15	1-247-767-00	CARBON	2.2	5%	1/4W	
R1	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R2	1-216-037-00	METAL CHIP	330	5%	1/10W	
						(XR-C450: E, EA)
R4	1-216-041-00	METAL CHIP	470	5%	1/10W	
R5	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R6	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R7	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R8	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R9	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R10	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R11	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R12	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R13	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R14	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R15	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R17	1-216-073-00	METAL CHIP	10K	5%	1/10W	
						(XR-C450: E, EA)
R18	1-216-073-00	METAL CHIP	10K	5%	1/10W	
						(XR-C450: E, EA)
R19	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R91	1-216-295-00	CONDUCTOR, CHIP			(2012)	
R92	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
						(XR-C440/XR-C450: US, Canadian)
R101	1-216-214-00	METAL GLAZE	4.7K	5%	1/8W	
R102	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
						(XR-C440/XR-C450: US, Canadian)
R121	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
						(XR-C450: E, EA)
R121	1-216-295-00	CONDUCTOR, CHIP			(2012)	
						(XR-C440/XR-C450: US, Canadian)
R122	1-216-073-00	METAL CHIP	10K	5%	1/10W	
						(XR-C440/XR-C450: US, Canadian)
R133	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R134	1-216-230-00	METAL GLAZE	22K	5%	1/8W	
R142	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R151	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R171	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R172	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R173	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R174	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R175	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R176	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R177	1-216-129-00	METAL CHIP	2.2M	5%	1/10W	
R178	1-216-129-00	METAL CHIP	2.2M	5%	1/10W	
R191	1-216-298-00	METAL CHIP	2.2	5%	1/10W	

Ref. No.	Part No.	Description				Remark
R192	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R193	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R194	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R201	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R202	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
						(XR-C440/XR-C450: US, Canadian)
R233	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R234	1-216-230-00	METAL GLAZE	22K	5%	1/8W	
R242	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R251	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R271	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R272	1-216-017-00	METAL GLAZE	47	5%	1/10W	
R273	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R274	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R275	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R276	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R277	1-216-129-00	METAL CHIP	2.2M	5%	1/10W	
R278	1-216-129-00	METAL CHIP	2.2M	5%	1/10W	
R291	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R292	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R293	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R294	1-216-298-00	METAL CHIP	2.2	5%	1/10W	
R311	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R312	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R313	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R314	1-208-812-11	METAL GLAZE	18K	2%	1/10W	
R321	1-216-109-00	METAL CHIP	330K	5%	1/10W	
R322	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R323	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R331	1-216-009-00	METAL CHIP	22	5%	1/10W	
R332	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R333	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R334	1-216-113-00	METAL CHIP	470K	5%	1/10W	
R335	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R361	1-216-049-11	METAL GLAZE	1K	5%	1/10W	
R362	1-249-389-11	CARBON	4.7	5%	1/4W	
R363	1-249-389-11	CARBON	4.7	5%	1/4W	
R364	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R365	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R501	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R502	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R503	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W	
R504	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R505	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R506	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R507	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R508	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R509	1-216-246-00	METAL GLAZE	100K	5%	1/8W	
						(XR-C450: E, EA)

MAIN

Ref. No.	Part No.	Description			Remark
R510	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R511	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R512	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R513	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R514	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R515	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R516	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R517	1-216-081-00	METAL CHIP	22K	5%	1/10W
R518	1-216-081-00	METAL CHIP	22K	5%	1/10W
R519	1-216-190-00	METAL GLAZE	470	5%	1/8W
R520	1-216-081-00	METAL CHIP	22K	5%	1/10W
R521	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R522	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R523	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R524	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R525	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R526	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R527	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R528	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R529	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R530	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R531	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R532	1-216-246-00	METAL GLAZE	100K	5%	1/8W
R533	1-216-025-00	METAL GLAZE	100	5%	1/10W
R534	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R535	1-216-085-00	METAL CHIP	33K	5%	1/10W (XR-C440)
R535	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C450)
R536	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C440)
R537	1-216-089-00	METAL GLAZE	47K	5%	1/10W (XR-C440)
R537	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C450: US, Canadian)
R538	1-216-093-00	METAL CHIP	68K	5%	1/10W (XR-C450: US, Canadian)
R538	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C440/XR-C450: E, EA)
R539	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C440)
R540	1-216-093-00	METAL CHIP	68K	5%	1/10W (XR-C440)
R540	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C450: E, EA)
R541	1-216-097-00	METAL GLAZE	100K	5%	1/10W (XR-C440/XR-C450: US, Canadian)
R542	1-216-198-00	METAL GLAZE	1K	5%	1/8W
R601	1-216-049-11	METAL GLAZE	1K	5%	1/10W (XR-C440/XR-C450: E, EA)
R602	1-216-129-00	METAL CHIP	2.2M	5%	1/10W (XR-C440/XR-C450: E, EA)
R611	1-216-073-00	METAL CHIP	10K	5%	1/10W
R612	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R613	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R621	1-216-017-00	METAL GLAZE	47	5%	1/10W
R622	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R631	1-249-383-11	CARBON	1.5	5%	1/6W
R632	1-249-383-11	CARBON	1.5	5%	1/6W
R633	1-249-383-11	CARBON	1.5	5%	1/6W
R634	1-249-383-11	CARBON	1.5	5%	1/6W
R636	1-216-186-00	METAL GLAZE	330	5%	1/8W
R638	1-216-025-00	METAL GLAZE	100	5%	1/10W
R639	1-216-025-00	METAL GLAZE	100	5%	1/10W
R640	1-216-057-00	METAL CHIP	2.2K	5%	1/10W (XR-C450)
R641	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R642	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R651	1-216-113-00	METAL CHIP	470K	5%	1/10W
R652	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R653	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R654	1-208-806-11	METAL GLAZE	10K	0.50%	1/10W
R655	1-216-025-00	METAL GLAZE	100	5%	1/10W
R656	1-216-025-00	METAL GLAZE	100	5%	1/10W
R661	1-216-206-00	METAL GLAZE	2.2K	5%	1/8W
R662	1-216-073-00	METAL CHIP	10K	5%	1/10W
R663	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R664	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R665	1-216-085-00	METAL CHIP	33K	5%	1/10W
R701	1-216-017-00	METAL GLAZE	47	5%	1/10W
R702	1-216-073-00	METAL CHIP	10K	5%	1/10W
R703	1-216-174-00	METAL GLAZE	100	5%	1/8W
R704	1-216-025-00	METAL GLAZE	100	5%	1/10W
R705	1-216-089-00	METAL GLAZE	47K	5%	1/10W (XR-C450)
		< VARIABLE RESISTOR >			
RV131	1-223-829-11	RES, ADJ, CARBON 1.0K			
RV231	1-223-829-11	RES, ADJ, CARBON 1.0K			
		< SWITCH >			
S501	1-571-478-11	SWITCH, SLIDE (POWER SELECT)			
S502	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (XR-C440/XR-C450: E, EA)			
S503	1-692-431-21	SWITCH, TACTILE (RESET)			
		< TUNER >			
TU1	A-3282-019-A	TUNER UNIT TUX-008 (EA) (XR-C450: E, EA)			

Ref. No.	Part No.	Description	Remark
TU1	A-3282-034-A	TUNER UNIT TUX-010 (E)	(XR-C440/XR-C450: US, Canadian)
		< VIBRATOR >	
X1	1-577-126-51	VIBRATOR, CRYSTAL (7.2MHz)	
X501	1-579-233-11	VIBRATOR, CERAMIC (5MHz)	
X502	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)	
**********			
		MISCELLANEOUS	
		**********	
9	1-776-207-11	CORD (WITH CONNECTOR)	(XR-C440/XR-C450: E, EA)
9	1-776-207-31	CORD (WITH CONNECTOR)	(XR-C450: US, Canadian)
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A)	
HP901	1-500-196-21	HEAD, MAGNETIC (PLAYBACK)	
M901	A-3291-665-A	MOTOR ASSY, MAIN (CAPSTAN/REEL)	
**********			
		**********	
		HARDWARE LIST	
		**********	
#1	7-621-772-10	SCREW +B 2X4	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#3	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-106-19	SCREW +P 2X10 TYPE2 NON-SLIT	
#6	7-624-104-04	STOP RING 2.0, TYPE-E	
#7	7-627-553-17	PRECISION SCREW +P 2X2 TYPE3	
**********			
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-467-559-22	REMOTE COMMANDER (RM-X40)	(XR-C450: E, EA)
	1-473-067-31	REMOTE COMMANDER (RM-X2S) (XR-C440)	
	3-856-246-61	MANUAL, INSTRUCTION, INSTALL (for RM-X2S) (ENGLISH, FRENCH, GERMAN, DUTCH, SWEDISH, ITALIAN, PORTUGUESE, CHINESE) (XR-C440)	
	3-859-489-31	MANUAL, INSTRUCTION (ENGLISH)	(XR-C450: US, Canadian)
	3-859-489-41	MANUAL, INSTRUCTION (FRENCH)	(XR-C450: Canadian)
	3-859-489-51	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (XR-C450: E)	
	3-859-490-31	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (XR-C450: US, Canadian)	
	3-859-490-41	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE) (XR-C450: E)	
	3-859-491-21	MANUAL, INSTRUCTION (ENGLISH, SPANISH, CHINESE) (XR-C440)	
	3-859-893-11	MANUAL, INSTRUCTION (ENGLISH, ARABIC)	(XR-C450: EA)
	3-859-894-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, ARABIC)	(XR-C450: EA)
	3-859-492-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH, CHINESE)	(XR-C440)
	9-939-081-01	LID, BATTERY CASE (for RM-X40)	
	X-3373-371-1	CASE ASSY (for FRONT PANEL)	
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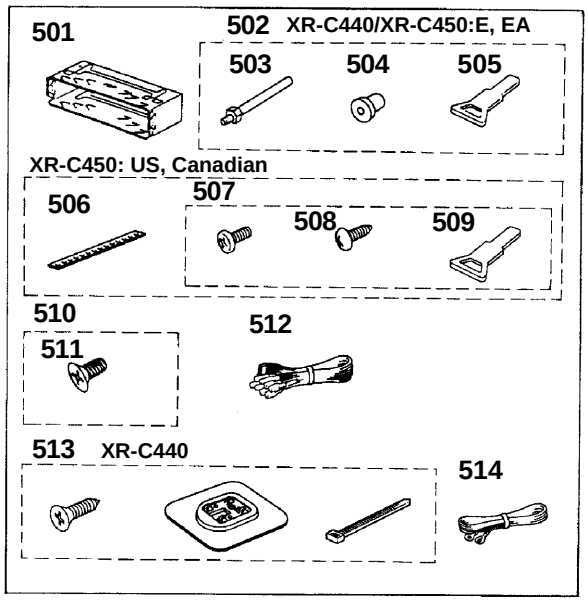
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	3-916-161-31	FRAME ASSY	
502	X-3370-077-1	SCREW ASSY (AE.KEY), FITTING	(XR-C440/XR-C450: E, EA)
503	3-386-828-01	SCREW, FITTING (XR-C440/XR-C450: E, EA)	
504	3-349-410-01	BUSHING (XR-C440/XR-C450: E, EA)	
505	3-388-078-01	KEY (XR-C440/XR-C450: E, EA)	
506	3-924-961-01	SUPPORT (ND), FITTING	(XR-C450: US, Canadian)
507	X-3370-076-1	SCREW ASSY (KEY), FITTING	(XR-C450: US, Canadian)
508	7-682-560-04	SCREW +P 4X6 (XR-C450: US, Canadian)	
509	3-926-426-01	KEY (XR-C450: US, Canadian)	
510	X-3371-913-1	SCREW ASSY (J)	
511	3-934-325-01	SCREW, +K (5X8) TAPPING	
512	1-776-207-11	CORD (WITH CONNECTOR)	(XR-C440/XR-C450: E, EA)
512	1-776-207-31	CORD (WITH CONNECTOR)	(XR-C450: US, Canadian)
513	X-3373-432-1	BRACKET ASSY (XR-C440)	
514	1-775-543-11	CORD, GROUND	



REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.1	2001.08	Correction-1 is included
1.0	1997.05	Correction-1
	1997.01	New